

here-and-there with Ulcers of this kind as broad as the Palm of one's Hand, while in some Places, between the Ulcers, the Skin remained entire, and appeared as if it had been cut into Girdles; so that, after the Cure was perfected, the remaining Scars afforded a very odd Prospect of Deformity. In this Patient observed, that the naked Muscles still appeared extremely beautiful and lively; and, by a diligent Examination, I found, that the Ulcers had not dug inwards, nor spread their devouring Rage beyond the Tunica Pinguetiosa; and that they had not destroyed the Skin itself, otherwise than by corroding the Vessels under it, and so cutting off from it all fresh Supplies of nutritious Juices. From this Case I became acquainted with the singular Genius of this Disease: Here I saw it in the Shape wherein it first discovered itself in *Europe*, and agreeable to the Description given by the oldest Authors on this Subject: I found out the Reason why, upon its first Appearance, it got the Name of the *Variolæ Hispanicæ*; but, at the same time, I was made sensible what a wide Difference there is betwixt this Disease, as it then appeared, and that which at this Day is so familiar to all the *Europeans*.

When you make an Attempt to cure an Ulcer of this Kind by such Remedies as are found to be the most effectual against other Ulcers, your Pains will be to very little Purpose, unless you separate at once all the tainted Fat with the Knife, or the actual Caustery, or Corrosives: But then, after, by corrosive Applications, you have burnt the Ulcer to a Crust, the Poison retained under the hard Eschar exerts its Fury, diffuses itself still more and more, scatters its malignant Power through the neighbouring Parts, and often produces a very virulent Pox. Upon this Account, an unlucky Practice, which, at present, is so common among some Physicians, is greatly to be condemn'd. I mean the Custom of touching those small Ulcers with the Lapis Infernalis, Aqua divina Fernelii, Aqua Vitrioli, Precipitate, and other Applications of the same Nature; from which the Tribe of Mountebanks, whose only Aim is to fill their Pockets, promise such mighty Things: For Applications of this Kind produce an Eschar, from which I have very frequently seen a Pox ensue. The most reasonable Method of treating these Ulcers is by emollient, saponaceous, watery Fomentations, that they may be kept open as long as possible, may remain soft and perspirable, so as to discharge, by the Mouths of the open Vessels, the poisonous Matter thus determin'd outwards, and facilitate its Egress. This, to be sure, is the safe, this the effectual Method of healing those malignant Exulcerations, as I have often found by Experience, after other Remedies have been repeated several times with very bad Success. What naturally leads one to this Practice is, that a plentiful Running, in a virulent Gonorrhea, kept up, for a long time, by proper Methods, is the most effectual Preservative hitherto known from a Pox; whereas, on the contrary, nothing so soon or so certainly occasions a Pox, as an unreasonable Stop put to this Discharge.

By this time, I imagine, I have given a clear Account of the Nature of this Disease, while it is yet in a simple State; as also of the proper Method of Cure, which consists entirely in discharging all the poisonous Particles involv'd in the oily Mass. This is easily accomplish'd in a recent Taint, affecting only one Part; but when the Disease is become inveterate, when the Poison has widely dispersed itself thro' the Habit, and has seiz'd the internal Parts, which lie beyond the Reach of Fomentations, it becomes a very difficult Task.

It is now necessary to take a View of those Ulcers, when they have broke out in a Part that is not covered with the Skin. As there are a great many such Parts in the human Body, I do not pretend to consider each of them in this Condition; that would make sufficient Materials for a large Volume: But let us suppose the Glans Penis, for Instance, to be affected with such an Ulcer. From the Inflation of this wondrous Fabric in the Venereal Organ, the nervous Papillæ are stretched and erected, so as to become susceptible of the highest sensual Pleasure. This Part consists of the Corpus spongiosum Urethræ, produced as far as to the Orifice of this Canal, and thence reflected over the Extremities of the two Corpora spongiosa Penis to where it terminates, forming a rising Limbus call'd the Corona Glandis. The proper Structure of the Glans is, therefore, principally composed of the same Substance with that of the Urethra. Hence, by the Torrent of arterial Blood still pouring in, while its Return by the Veins is intercepted by the Action of the Musculi Erectores, applied to the bulbous Part of the Urethra, below the Neck of the Bladder, this Fabric is brown up, stretched, and may be distended even to bursting; tho' this violent Tension only happens in the Venereal Action, when it is just upon the Crisis; so that, at this time, the Glans is highly inflamed: But, after the Explosion of the Semen, this Part soonest grows flaccid; and, as in that Instant it is become very bibulous, it easily sucks into its empty'd Cells any penetrating Particles applied to its glowing Surface. Hence, in the first Place, we learn the Reason why the Contagion so frequently affects this Part; why the fungous Part of the Glans is often so turgid with the Venereal Pus already described, as that, upon Compression, it oozes out at its Pores; why Ulcers, formed in this spongy Fa-

bric, consuming its Structure, and melting it down into a Venereal Corruption, shall cause the whole mortify'd Glans to drop off, while the rest of the Penis frequently remains entire. In the last Place, a Communication plainly appears, by means of the Corpus spongiosum Urethræ, to be continued all the Way from the Top of the Penis to below the Neck of the Bladder; and since one and the same cellular Body is continued all that Way, and the Surfaces of these Cells are constantly besmear'd with a fat unctuous Moisture, to preserve them in a slippery expansive State, we see plainly why an Infection received here proceeds in its Growth with so much Luxuriancy.

Besides the Corpus spongiosum Urethræ, a numerous Series of sensible nervous Papillæ contributes to the Composition of the Glans. These lie disposed in regular Rows upon the Surface of the spongy Fabric, and constitute in such a manner the Surface of the Glans, that the Extremities of these Nerves, which are the proper Organs of Pleasure and Pain, lie upon one another, and are braced down by that very tender Membrane, which covers the Glans. Hence, when the Glans is bared of this external Involucrum, the loosen'd disengag'd Papillæ stare outwards, and the whole Surface of this Part appears jagged and villous. Again, every one of these Papillæ is wrapt up, separate from the rest, in a subtle cellular Membrane. When, therefore, the Venereal Poison, after having made its Way thro' the thin external Membrane of the Glans, has also destroy'd the proper Involucra of those Nerves, the Papillæ are now laid bare. But then what an intolerable Pain is rais'd! Such an exquisite one, that there is scarce a more insupportable Symptom attends the Venereal Disease. If then this slight cellular Texture be destroy'd by the acrid Poison, the unconfin'd Papillæ will begin to sprout, and form Venereal Warts. This dreadful Symptom appears principally upon the Corona of the Glans, where the Papillæ are the most numerous. I have seen with Horror the Glans deformed, and become prickly like a Hedge-hog, and the Prepuce almost quite depriv'd of Motion, by those dreadful Excrescences: And it has frequently happened, in such a Case, from an unskilful Management, such as the Fretting the naked, sensible, papillous Substance of the Glans, by acrid Applications, that the whole Body of the Penis has become most miserably inflamed, bloated, and seiz'd with an exquisitely painful Priapism. Wherefore the safest Remedies against this kind of Misfortune too, are emollient, moistening, relaxing, anodyne Applications, and such things as solicit the Poison outwards. These Remedies you will be obliged to have recourse to, tho' late, when the Disturbances, rous'd by corrosive Applications, are to be appeased. In those Cases I have perform'd by Milk and Marshmallows what I could not by Quicksilver; and I have found the good Success of Unguentum de Althæa, or Nutritum, where Ægyptiacum and mercurial Ointments were of no Use.

The last Part which helps to constitute the Glans, is that fore-mentioned fine Membrane in which it is enveloped. This is a Production of the Cuticula, which lines the internal Surface of the Præputium; whence it ascends over the Corona Glandis, and gives a Covering to the whole Glans. It is likewise expanded over the external Surface of the Prepuce, and the Integuments of the whole Penis forming its Epidermis. And thus, by its means, an Intercourse and Sympathy is carried on betwixt the Cuticula of the Penis and the Surface of the Glans. Hence it is, that malignant Ulcers of the Penis have sometimes been known to have infected the Glans, and Disorders of the Glans to have propagated their Contagion to the external Parts of the Penis. Here then we see one Instance of the wondrous and artful Mechanism, by which Nature produces so many different Mischiefs by the same Poison, still mixed with the oily Humours, but exerting itself upon different Parts of the Body.

If, therefore, the Contagion has been lately applied to a Part covered with the Cutis, let it be well chafed, for a long time together, with warm Wine, Honey, and Salt, mixed: After this let the Part be wrapt up in Cloths dipt in the same Fomentation, and kept constantly in an equal Heat. If the Infection has lodged there for any considerable time before the Physician was call'd, after the Part has been bathed with the same Fomentation very warm, let a Vesicatory, made up with Cantharides, be applied to it, with Cloths, dipt in the Fomentation, over all. After the Blister is cut, let the Discharge be kept up with Unguentum Aureum, or Tetrapharmicum, together with a very small Quantity of red Precipitate, and over the Ointment too apply a Stupe of the same Fomentation. In this manner let the Ulcer be managed for twelve Days, or more; and if the Patient, in the mean time, abstains from fat Meat, and every thing of a hot stimulating Nature, he need not be anxious about the Event.

If the Contagion is recent, and has seized a Part which is not covered with the Cutis, such as the internal Surface of the Prepuce, the Glans, the Lips, or the Mouth; suppose either of the two first-mentioned Parts be affected, let the Penis, with the Prepuce drawn back, be bathed in a Fomentation of the same, or the like Materials. Baths for this Purpose cannot be of a too emollient Nature; for here the main Stress of the



the Cure depends upon relaxing the Pores, so that the infecting Matter may be discharged by them. Those Parts, therefore, ought always to be kept perspirable, with warm, moist, emollient Applications; and such Remedies are to be used even after the infected Part is ulcerated; for while a free Discharge is thus procured to the morbid Matter, it will scarce make its Way inwards; and by this means the present Malady is cured, and Affections which would otherwise happen afterwards are prevented. In the mean time, hydragogue Purges, frequently repeated, are likewise conducive to the same Ends; and an emollient Balsam, compounded of Turpentine, the Yolk of an Egg, and crude Mercury, spread upon a Pledget, and applied to the Ulcer, is of great Service. In short, by this Method one may promise almost perfectly to remove this Mischief, which, when neglected, very often grows up to a most virulent Pox. Nor let any one wonder, that I should propose this simple Method of Cure, without giving inwardly so much as one Grain of Mercury, while it is the common Opinion of almost all that practise in this Disease, that nothing but Mercury can prevail against it, and that Mercury is the very thing that cannot be dispensed with in the Cure. Consider only, that hitherto I have put the Case, that the Infection is of very short Standing; that only one, and that an external Part is affected; and that the whole Fomes of the Disease lies in one small Ulcer. While the Case stands thus, I dare promise a perfect Cure from the Method already laid down; and I am absolutely certain, that this Method is sufficient. Wherefore I shall never be reconciled to the rash Practice of some, who, whenever they hear a young Fellow complain of any Venereal Disorder, at the first prescribe Mercury, which always gives the Constitution a Shock, and often a needless one.

But as the softer Sex are, in this Disease, for the most part, affected with the same kind of Ulcers, breaking out in the mucilaginous Sinuses within the Pudenda, here too nothing is of greater Use, while the Malady is yet in the State already describ'd, than to foment and bathe the Parts with emollient, relaxing, detergent, and antiseptic Liquors. Vinegar, Wine, Honey, and Salt, possess the two last-mention'd Qualities; for the two first I would chuse all the emollient Herbs. I have had the Pleasure to see a speedy Cure perform'd, by this Method, upon a great many Female Patients, while the Disease was of short Standing, and as yet unattended with other Symptoms. *Boerhaave's Preface to the Aphrodisiacus.*

**CHANNA**, *χάννα*, *χάνν*. A sort of Sea-fish, not unlike the Perch, whose Flesh, however, is said to be somewhat harder. There is another sort of Fish, not unlike this, call'd *Cannadella*, or rather *Channadella*, which, at *Marseilles*, is known by the Name of *Channa*. *Castellus.*

**CHANTERELLA** *flava, gelatinosa. Fungus gelatinus, flavus.* Vaill. 58.

This is about an Inch in Height, and about a Line or two thick; it usually grows in Clusters. The Stalks are a little flattened, and furrow'd on one Side; and their Surface is shagreen'd. The Head is usually angular, with the Centre sunk into a kind of Navel; and the Edges, which are turn'd down, are cut into three or four rounded Segments. The upper Surface of the Head is yellow, but more dirty and livid than the Stalks. When it decays, it turns into a greenish Jelly.

Under the Name of *Chanterella*, I comprehend those Fungi, whose Head is solid, that is, neither lamellated, nor porous, nor latticed, nor prickly, nor turning to Dust when ripe. *Martyn's Tournefort.*

**CHAOMANTIA**, amongst the enthusiastical Chymists, is the Art of making Presages from Observations on the Air.

**CHAOS**, in the Phrase of *Paracelsus*, imports the Air. It has also some other whimsical Significations among the Alchymists, of very little Importance.

**CHAOSDA**. An Epithet for the Plague, us'd by *Paracelsus*.

**CHAOVA**. The *Egyptian* Name for *COFFEE*, which see.

**CHARA** is a Genus of Plants describ'd, among many others, by *M. Vaillant*, in the Memoirs of the Academy of Sciences, for the Year 1719. as follows: 'The Flowers of all the Species grow upon the Leaves, and are imperfect, regular, monopetalous, and Hermaphrodite. The Ovary grows on the Top, where, by its Indenture, it represents the Figure of an antique Crown, whence it becomes a coronated Seed-vessel, solid, and monospermous, or containing a single Seed. The Leaves are simple, without Pedicles, and dispos'd in Circles about the Stalks at Intervals; those on which the Flowers grow are indented in such a manner, that the Segments are directly opposite, so as to form, by their Conjunction, the Resemblance of a Pair of Pincers, in every one of which is lodg'd an Ovary.'

*M. Vaillant* distinguishes nine Species of the *Chara*, but I find no medicinal Virtues attributed to either of them. All these Species were before call'd by the Name of *Equiseta*, Horsetails.

VOL. II.

**CHARABE**, or *Carabe*, Amber. See *AMBRA*.

**CHARACIAS**, from *χάραξ*, a Bulwark, or Fence. An Epithet given to some Plants, which require a Support, as the Vine. It is commonly join'd with the *Arundo Pallatoria*; and by *Dioscorides*, L. 4. C. 165. to the *Tithymalus Mas*.

**CHARACTA**, a Weight call'd a Carat. See *CARATA*.

**CHARACTER**, in Botany, is that Assemblage of Marks, by which every Species of Plants is distinguished from every other Species.

In Chymistry it imports a Mark importing some particular Thing, the Principal of which I have given Tab. 20. and 21.

*Character* also sometimes signifies an hereditary Disposition to some particular Disease.

**CHARADRIUS**, *χαραδριος*. A Sort of Bird, of which *Ælian* fabulously relates, that the Sight of it cures a Person of the Jaundice. It is call'd also *Galgulus*, and *Hiaticula*.

**CHARAMAIS**. The *Turkish* and *Persian* Name for the *AMBELA*, which see.

**CHARANTIA**. The *Balsamina Mas*, or *Momordica*.

**CHARCEDONIUS Lapis**. The same as *Chalcedonius Lapis*.

**CHARIEN**, *χάριεν*. The Name of a Plant, the Root of which, if applied to the Navel but a very short time, expels the dead Fœtus. I don't find, that it is precisely known what this Plant is. Some take it to be the *Tithymalus Characias*.

**CHARISTOLOCHIA**. A Name for the *Artemisia*, Mugwort.

**CHARME**, or *Charmis*. The Name of an Antidote mention'd by *Galen*, Lib. 1. de Antidot. Cap. 4.

**CHARONIUS**, *χαρώνιος*, Charonian. An Epithet for Caves, some of which are found in *Italy*, and in other Parts of the World, where the Air is so loaded with a poisonous Vapour, that Animals cannot live in them, even a few Moments.

**CHARTA VIRGINEA**. A Name for the *AMNIOS*.

**CHASME**, *χάσμα*; or *χασμός*. Oscitation, Gaping. *Hippocrates*, in his *Epidemics*, Lib. 2. informs us, that long Respiration is a Cure for continual Oscitation. I suppose he means deep Respiration, and drawing in the Air at long Intervals.

**CHATE**. The *Egyptian* Cucumber, call'd by *Boerhaave* *Cucumis*; *Ægyptius*; *rotundifolius*. See *CUCUMIS*.

**CHAULIODONTA**, *χαυλιόδοντα*. Those Animals are thus called, whose Teeth grow a great Length out of their Mouths, as the Boar and Elephant.

**CHAUNOS**, *χαυνός*. Soft, lax, yielding to the Pressure of the Fingers, fungous. It is applied by *Hippocrates* to Tumors, and to the Bones; and also sometimes to Urine, when it imports that which is aqueous and thin, and without any Sediment or Cloud; or perhaps that in which a kind of spongy Cloud appears.

**CHEDROPA**, *χέδρoπa*. All Sorts of Corn and Pulse.

**CHEILOCACE**, *χειλοκάκη*, from *χείλος*, a Lip, and *κακόν*, an Evil. Literally the *Lip-evil*; a Swelling of the Lips, to which the Inhabitants of Northern Countries, especially Children, are said to be very subject.

**CHEILOS**, *χείλος*. A Lip.

**CHEIMETLON**, *χείμετλον*, from *χῆμα*, the Winter. A Chilblain. See *PERNIO*.

**CHEIMIA**, *χείμιν*. Cold, Shivering.

**CHEIMON**, *χείμων*. Winter, or cold Weather.

**CHEIR**, *χείρ*. The Hand. See *BRACHIUM*.

**CHEIRAPSIA**, *χειρῶψια*, from *χείρ*, the Hand, and *ἄπτωμαι*, to touch. Scratching. *Cæsar. Aurelianus.*

**CHEIRI**, *Cheyri*, or *Keiri*. Wall-flower. It is the *Leucoium*; *luteum*; *vulgare*. See *LEUCOIUM*.

**CHEIRIATER**, *χειράτης*, from *χείρ*, the Hand, and *ιατρός*, a Physician. A Surgeon.

**CHEIRISMA**, *χείρισμα*, or *χειρισμός*. A handling of any thing, or a manual Operation.

**CHEIRIXIS**, *χείριξις*. Surgery in general, or the Treatment of any Disorder, comprehending every thing which is done with a View of curing it.

**CHEIRONOMIA**, *χειρονομία*. An Exercise mention'd by *Hippocrates* in his Treatise *De Vietus Ratione*, L. 2. which consisted in particular Gesticulations of the Hands.

**CHEIZI**, in the Phrase of *Paracelsus*, when, speaking of Minerals, imports Quicksilver; but, relative to Vegetables, it signifies their Flowers. Some interpret it the *Aurum Potabile*, others Antimony. *Rulandus.*

**CHELA**, *χῆλα*, has many Significations in Medicine; for it imports a forked Probe, mentioned by *Hippocrates*, Lib. 2. de Morbis, used in extracting a Polypus of the Nose. But, in *Ruffus Ephesus*, Cap. 4. *χῆλαι*, *Chelæ*, implies the Extremities of the *Cilia*, which touch each other when the Eyes are shut. But the most frequent Signification of *Chelæ* is Claws, particularly those of the Crab. *Chelæ*, further, signifies Fissures in the Heels, Feet, or Pudenda.

**CHELIDON**, *χελιδών*. The Swallow. See *HIMUNNA*. The Hollow also, at the Flexure of the Arm, is call'd by this Name.



**CHELIDONIUM Majus.** The greater Celandine.

The Characters are ;

The Flower-cup consists of two Leaves, which soon fall away. The Flower is tetrapetalous, cruciform, and soon falls off. The Petals grow round the Base of the Ovary, whence also arise many Stamina. The Ovary is furnish'd with a Tube, and becomes a Pod, with one Seed-vessel, which is bivalve, the Valves adhering to the Fenestra, and contains many roundish Seeds. The Plant abounds in every Part with a gold-colour'd acrimonious Juice. *Boerhaave's Index alter*, p. 305. Pars 1.

*Boerhaave* mentions five different Sorts of this Plant.

1. *Chelidonium* ; majus ; vulgare. *Park. Theat.* 616. *C. B. Pin.* 144. *Hist. Oxon.* 2. 257. *Dill. Cat. Giff.* 56. *Tourn. Inst.* 231. *Flem. Bot.* 198. *Buxb.* 68. *Boerb. Ind. A.* 305. *Mer. Pin.* 26. **CHELIDONIUM MAJUS**, *Offic. Ger.* 911. *Emac.* 1096. *Chab.* 484. *Merc. Bot.* 1. 28. *Phyt. Brit.* 27. *Raii Hist.* 1. 858. *Chelidonia*, *J. B.* 3. 482. *Chelidonium*, *five Chelidonia*, *Rupp. Flor. Jen.* 56. *Papaver corniculatum luteum Chelidonia dictum*, *Raii Synop.* 3. 309. **CELANDINE.**

The Root of this Celandine is pretty thick at the Head, divided into Branches, which fix themselves pretty deep in the Earth ; from which spring bluish-green wing'd Leaves, divided generally into five Parts, somewhat like Columbines, but longer, the Section at the End being the largest. The Stalks grow to be a Foot or more high, full of thick Joints or Knees, having two smaller Leaves at each Joint. The Flowers grow several together, upon a Foot-stalk three or four Inches long, each having a shorter of its own. They consist of four small yellow Leaves, included in Calyces of two hollow Parts ; and after they are fallen, which they soon do, they are follow'd by pretty long narrow Pods, full of small round shining black Seed. Every Part of the Plant, when broken, emits a yellow bitter acrid Juice. It grows among waste Grounds and Rubbish, upon Walls and Buildings ; and flowers in May.

*Celandine* is aperitive and cleansing, opening Obstructions of the Spleen and Liver ; and of great Use in curing the Jaundice and Scurvy. Some reckon it cordial, and a good Antidote against the Plague. Some Quantity of it is put into the *Aqua Mirabilis*. Outwardly it is used for sore Eyes, to dry up the Rheum, and take away Specks and Films ; as also against Tetters and Ring-worms, and scurfy Breakings-out. *Miller's Bot. Off.*

*Dioscorides* relates, that it was believed in his Time, that the Swallows, by the Application of this Herb, restored Sight to their young ones, whose Eyes had been put out. *Aristotle* was of the same Opinion ; but *Celsus* justly rejected this Error, for Experience shews, that in less than an Hour an Animal sees clearly, tho' the horny Coat of the Eye has been pierced, so that several Drops of the aqueous Humour came out. *Celandine* is bitter, acrid, and burning, especially the Root, which yields more Orange-colour'd Juice than the other Parts of the Plant : It gives but a faint red Colour to blue Paper ; and smells like rotten Eggs, which makes one believe, that its Juice is (if I may so say) phagedenic, something like the Liquor which results from the Mixture of the Solution of Sublimate and Lime-water, or Milk which has boil'd some time with an acrid Salt.

*Celandine*, by a chymical Analysis, yields a good deal of Salt, both fix'd and volatile ; but it is involved in a great deal of Sulphur and Earth.

This Plant, taken inwardly, is very aperitive : The Infusion of a Pencil of its Leaves, macerated cold, a whole Night, in a Glass of Whey, with one Dram of Cream of Tartar, is a good Remedy for the Jaundice and Green-sickness : Some add to it an Ounce of the Syrup of Succory. For the Dropsy they infuse, for twenty-four Hours, one Ounce of the Root of Celandine, and half an Ounce of Tincture of Steel, in a Pint of White-wine : They strain the Infusion thro' a Linen Cloth, and give the Patient three Ounces of it twice a Day. The following Preparation is very good for Vapours, and a Consumption of the Lungs :

You must put in Digestion, for eight Days, twelve Pounds of the whole Plant, gently bruised ; three Dozen of Crayfish, cut small ; and two Pounds of Honey : Lute the Alembic, and distil these Ingredients in *Balneo Mariae*.

This Water, being drank from two to four Ounces, is excellent for the Vapours. It abates the Inflammation of the Eyes, and dries up the Ulcers of those Parts, as well as the Juice of Celandine, temper'd with Milk. It is applied, without Milk, to Webs in the Eyes, in order to eat them away. *Julian Pandmier*, a famous Physician of the Faculty of Paris, set a great Value on the Juice of the Root of this Plant, in the Plague. The Herb, bruised, cures Wounds : Some add to it the Leaves of the horned Poppy. *Martyn's Tournefort*.

2. *Chelidonium* ; majus ; foliis quernis ; flore laciniato. *M. H.* 2. 257. **GREATER CELANDINE, WITH LEAVES LIKE THE OAK, AND LACINIATED FLOWERS.**

3. *Chelidonium* ; majus ; foliis & flore minutissimè laciniatis. *H. R. Par.* 49. **GREATER CELANDINE, WITH FINE-CUT LEAVES AND FLOWERS.**

This, *Boerhaave* says, is the *Othonna* of *Dioscorides*. See **AFRICANUS FLOS.**

4. *Chelidonium* ; maximum ; Canadense ; ἀκων. *Corn.* 212. **LARGE CANADA CELANDINE, WITHOUT STALKS.**

5. *Chelidonium* ; majus ; vulgare. *C. B. Pin.* 144.

*Boerhaave's Index alter Plantarum*, Vol. 1.

**CHELIDONIUM MINUS.** The lesser Celandine.

The Characters are ;

It has a grumous, or glandulous, perennial Root : The Leaves are roundish ; the Flower-stalks trail upon the Ground ; at their Top they bear a Placenta, whose Base is surrounded by the Perianthium, which consists of three Leaves, sometimes of four, but seldom of five, which are always caducous. The Flower is rosaceous, expanded, consisting of five or more Petals, which arise from the very Bottom of the Placenta, within the Flower-cup, with a Multitude of Stamina, arising from the Bottom of the Placenta, between the Petals and the Ovary. The Placenta contains an Ovary of a globular Form, each of whose Cells, or Eggs, are furnish'd with a crooked Vagina, which has a fungous Apex. *Boerhaave's Index alter*.

*Boerhaave* takes notice of four Species of the lesser Celandine.

1. **CHELIDONIUM ; MINUS.** *Offic. Ger.* 669. *Emac.* 816. *Chab.* 484. *Park. Theat.* 617. *Raii Hist.* 579. *Synop.* 3. 246. *Mer. Pin.* 26. *Boerb. Ind. A.* 29. *Chelidonium minus*, *five Scrophularia minor*, *Merc. Bot.* 1. 28. *Phyt. Brit.* 27. *Chelidonia rotundifolia minor*, *C. B. Pin.* 309. *Scrophularia minor five Chelidonium minus vulgo dictum*, *J. B.* 3. 468. *Ficaria*, *Dill. Cat. Giff.* 39. *Ficaria vulgaris*, *Rupp. Flor. Jen.* 127. *Buxb.* 110. *Ranunculus vernus rotundifolius minor*, *Tourn. Inst.* 286. *Ranunculus præcox rotundifolius radice granulosa*, *Hist. Oxon.* 2. 446. *Ranunculus Chelidonides rotundifolius præcox radice granulata*, *Pluk. Almag.* 314. *Ranunculus rotundifolius minor*, *Hort. Monsp.* 169. **PILEWORT.**

This small Plant, besides the slender white fibrous Root, which spreads and fastens itself in the Ground, has several small oval whitish Tubercles, somewhat resembling the Piles, or the Swellings of the Hæmorrhoids, whence it takes its Name. The Leaves grow upon long Foot-stalks, smooth and shining, in Shape of Ivy-leaves, but less, rounder-pointed, and of not so firm a Texture, sometimes spotted with whitish Spots. The Flowers grow upon pretty long Stalks inclining to the Earth, with a Leaf or two on them more angular, sharper-pointed, and smaller, than the others : They consist of eight or nine narrow sharp-pointed Petals, of a shining yellow Colour, with a few yellow Stamina in the Middle, set about a greenish Head, which is composed of small naked Seeds.

It grows in Meadows and moist Pastures, and by Hedge-sides ; and flowers in April.

This Herb, on account of its Signature, is accounted to be good for the Hæmorrhoids or Piles, to ease their Pain and Swelling, and stop their Bleeding, the Roots being taken inwardly, and an Ointment, made of the Leaves and Roots, applied outwardly. Some commend it for the Jaundice and Scurvy, especially in the Mouth, to strengthen the Gums, and preserve the Teeth. *Miller's Bot. Off.*

It is also esteem'd a good Remedy, either internally or externally used, for the Hernias in Children.

2. *Chelidonium* ; minus ; folio anguloso, maculoso.

3. *Chelidonium* ; minus ; flore pleno. *Camerar. Hort.*

40. **THE LESSER CELANDINE, WITH DOUBLE FLOWERS.**

4. *Chelidonium* ; minus ; folio majori, anguloso.

*Boerhaave's Index alter Plantarum*, Vol. 1. p. 29.

**CHELIDONIUS Lapis.** A Stone, found, as is said, in the Craw of a young Swallow. *Dioscorides*, L. 2. C. 60. informs us, that, if you open young Swallows, you will find in the Craw some Stones : Of these, says he, take two, one of various Colours, and another of only one Colour ; inclose these, before they have touch'd the Earth, in a Piece of the Skin of a Heifer, or Stag ; then tie them about the Arm, or Neck, and by this means you will relieve epileptic Patients, and generally restore them to Health. The superstitious Circumstances, with which this Remedy is to be attended, render its Efficacy much suspected ; for, first, the young Swallows must be those of the first Brood which the old Bird has had, a Thing very difficult to ascertain. Secondly, the Stones must be taken out of the Craw during the Increase of the Moon. Thirdly, they must never touch the Ground. I don't know, that any Experiments have been made with these Stones, either to determine, or disprove their Virtues ; neither should I think it worth the while.

**CHELONE**, χελών. A Tortoise. It imports also a Part of a surgical Machine, mention'd by *Orisajus de Machinamentis*, Cap. 4. & 5. See **TESTUDO.**



**CHELONE.** A Plant, so call'd by *Tournefort*, in the *Memoirs of the Royal Academy of Sciences for 1706.* from the Resemblance of its Galea to a Tortoise.

The Characters are ;

It has a squamous, short, green Calyx ; the Flower is monopetalous, and bilabiate ; the Galea resembling the Shell of a Tortoise, with a bifid Apex, and a trifid Beard, extending beyond the Galea. From the inner and lower Part of the Flower arise four Stamina, with testiculated Heads. The Ovary grows to the Placenta in the Bottom of the Calyx, within the Flower, is furnish'd with a long Tube, and becomes a Fruit perfectly resembling that of the Fox-glove, roundish, oblong, bicapular, and full of Seeds, which are adorn'd with a small foliaceous Fringe round the Edges. *Boerhaave's Index alter, Part 1. p. 240.*

*Boerhaave* mentions but one Species of this Plant, which is, *Chelone* ; *Acadiensis* ; flore albo. **WHITE FLOWERING CHELONE OF ARCADIA.**

*Boerhaave Index alter Plantarum, Vol. 1.*

**CHELONIUM,** *χελώνιον.* The convex Part of the Back, which is situated immediately under the Neck.

**CHELONITES** *Lapis.* A Name of the *Lapis Busonites.*

**CHELYS,** *χέλυς.* The Breast ; so call'd from its Figure, resembling the Back of a Tortoise.

**CHELYSCION,** *χελύσκιον,* from the preceding Word, imports a short dry Cough.

**CHEMA,** *χῆμα.* This, according to *Blancard, Lex. Rhenov. & Lem. Phar.* is the Name of a certain Measure sometimes mention'd by the Greek Physicians, and which is thought to have contain'd about two small Spoonfuls. But we must observe, that the *Athenians* had two *Chemas*, the larger of which weigh'd three Drams, and the lesser two ; which latter is equivalent to the thirtieth Part of the *Cotyle*, or Half-pint. It is not improbable, that, by the *Chema*, a certain Measure is denoted, containing as much as a certain Sea-shell, call'd *Chama*, holds. The determined Weight of this Quantity cannot be accurately ascertain'd, in consequence of the different specific Gravities of different Substances : Just as, at present, the Word *Spoonful* is used in a vague and undetermin'd Sense, especially with respect to Substances, of which 'tis a Matter of Indifference, whether a little more or a little less be used.

**CHEMIA,** *χημία,* is, by *Suidas*, defin'd *ἡ τῆ ἀργύρου καὶ χρυσῆ κατασκευῇ.* The Preparation of Silver and Gold. The Word *κατασκευῇ* seems to imply no more than the Separation of Silver and Gold from their Ores. *Suidas* adds, that the Emperor *Dioclesian* order'd all the Books he could procure, which treated on these Subjects, to be burnt ; lest the *Egyptians* should by this Art grow rich, and be tempted to rebel.

It should, at first Appearance, seem strange, that a flat Country, like that of *Egypt*, which was never remarkable for abounding with Mines of Metals, should be celebrated for the Skill of its Inhabitants, with respect to the Treatment of Metals. But, if we consider the prodigious Riches of the antient *Egypt*, we may, perhaps, find Reason to suspect, that it had some other Source of Wealth than the Fertility of the Soil. 'Tis not improbable, that the antient *Egyptians* carry'd on a Commerce into the inland Parts of *Africa*, where Gold Ore, or Gold Dust, was found, and perhaps Silver ; which Traffick, for political Reasons, they might conceal from other Nations. As the Priests ingross'd all the Learning, as well as Wealth, of the Country, these were probably the Smelters and Refiners of their Ores ; and the Method of treating them they would probably keep to themselves, both for national and private Considerations. Hence, if they wrote upon the Subject, whatever they deliver'd was so involved in Allegory, and designedly obscured, that nobody, but their own Order, could find out the Meaning.

It is even probable, that they pretended to the Art of converting baser Metals, which they used in their Processes, into real Gold, the better to conceal the true Sources of their Wealth. Now when Men of Learning, in after Ages, met with their Books, not being able to understand their true Meaning, and not knowing how to decypher them, they might take their Allegories in a literal Sense, and thus believe, that there really was a Method of making Gold from other Metals. When such a Notion, foolish as it was, had once begun to prevail, it was natural enough for the Avarice of Mankind to leave nothing untry'd for the Revival of so beneficial an Art, supposed to be lost. This Mistake was, probably, the Foundation for all those Researches which have been made after the Transmutation of Metals ; for I can never believe, that there ever was, in reality, any such Art ; the converting of one Metal into another being, in my Apprehension, attended with as much Difficulty as the converting a Thistle into a Cedar. The Mistake was, however, very fortunate for Physic ; because the Experiments made on this account gave Occasion to the Discovery of many important Remedies.

With respect to the Orthography of Chymistry, though a thing of no great Importance, some Controversies have been

raised upon this Subject, which it is not worth while to enter upon. I shall only remark, that the Derivation of the Word is utterly uncertain ; and, therefore, I shall always make use of *Chymistry* as a Word already received in the *English* Language ; tho' some, either out of an Affectation of Singularity, or too servile a Complaisance to the celebrated *Boerhaave*, or to the *French*, have lately call'd it *Chemistry*, or *Chemy* ; the last of which particularly appears to be a very trifling and idle Innovation.

Having given some Account of the Introduction of Chymistry into Medicine in the *Preface*, it remains, that I point out the Imperfections and Excellencies, the Uses and Abuses, of the Art ; and give a Catalogue of the principal Authors who have wrote on chymical Subjects. The first of these I shall do by giving the Substance of an Oration, wrote by *Boerhaave* with this View. Mean time, those who are inclined to be acquainted with the learned, but trifling Controversies relating to the Antiquity of Chymistry, may consult *Borrichius*, and *Conringtonius de Hermetica Medicina.* See also our *Preface*.

The Art of Chymistry is, by some of no mean Reputation for Wisdom and Gravity, exploded as subject to a Multitude of Errors, productive of very little useful, but consuming a Man's Fortune, and reducing him to Beggary, and, in short, as the Plague and Curse of a rational Mind. There are others, on the contrary, who, from a natural Inclination to the Art, or convinced by Experiments, think, that nothing worthy of the Subject can be said in Praise of Chymistry. But their Authority has but little Weight with good Judges, who know they are as much to be censur'd for their doting Fondness, as the former for their unreasonable Detestation and Reproaches. Confessing, therefore, those Errors which have been introduced by the Chymists into Arts and Sciences, I shall endeavour to prove, that these Errors are most effectually removed only by the Industry of the Artists in Chymistry.

With respect to the well-known Enthusiasm, and fabulous Turn, of the Chymists, there are some Causes to be assign'd, in the Nature of Things, why those who first cultivated this Art were so extremely addicted to Fiction. Chymistry was formerly in the Hands of Miners, and Smelters of Metals, Men unacquainted with the liberal Sciences, debar'd from all Commerce with the learned World, condemn'd to lead their Lives in Darkness under Ground, and to support their wretched Beings with coarse and hard Fare. Consider these Men daily obnoxious to a thousand Dangers, dreading what may happen, disturb'd in Mind, and leading a very uneasy Life. They tremble at the frequent Earthquakes, the rapid Torrents from the Mountains, at the Meteors and Damps, the Coruscations of the gross and sulphurous Exhalations, the Resoundings of the Caverns, and the subterraneous Bellowings. Under all this they have no wise or prudent Person to consult, who might remove their vain Fears, and restore Light to their troubled Minds : Hence they give their Attention to superstitious Tales, and fabulous Stories, calculated to frighten as well as amuse, and, by increasing Melancholy, to change Fools into Madmen. He who chuses such Masters as those for his Tutors in any Art, had need of an uncommon Firmness of Mind to keep himself free from those Errors and Vanities, with which they are corrupted : For such is the Case with those who give themselves to learn an Art, that the Authority of a Master, a Fable propagated by Tradition, and a Frequency of Examples, seduce those, who, in other respects, are very discreet, and skilful in distinguishing Fictions from Realities.

What made a fatal Addition to this Evil, of which we complain, was, that very learned Physicians, despising *Galen*, with the *Peripatetics* and *Arabians*, devoted themselves wholly to the Chymists. For when they found, that the first entertain'd them, for the most part, with nothing but Words, the other with Experiments ; that the former were flock'd with nothing but general Notions, and Speculations, form'd in the Brain ; but that the latter gave sensible Proofs of their Art by outward Effects ; admiring the Difference, they ran blindly into the Opinions, and embraced all the Ratiocinations of those Teachers who had so agreeably entertain'd them. This gave Occasion to the Revival of all those old and absurd Notions of the *Magi*, *Chaldeans*, and *Persians*, that the Fire was God ; with the fine and flattering Opinion of *Pythagoras*, concerning the Transmigration of Souls. Some, with *Epicurus*, asserted the Mind to be a small Cloud of Corpuseles, which were invisible, on account of their Minuteness ; others, with *Plato*, imagined Demons existing every-where. Some try'd the magic Arts of *Zoroaster* ; and you might observe the gravest and principal Men among the Chymists, seriously teaching and inculcating, as real Verities, all the ingenious Fictions of the Poets concerning the Fauni, Satyrs, Genii, Nymphs, Pygmies, and Domigods, the Lords of the Woods, Mountains, Waters, subterraneous Places, and the Air. They imposed on their Disciples a Belief of the Sorceries, Fascinations, and Inchantments of Shepherds and Swineherds, the vain Conjectures, and direful Prognostications, of Astrologers ; the Amulets worn by barbarous Nations, Talismans, Genii confin'd by Seals within Metals,



tals, and Spirits infused by Inchantments into solid Bodies. No Wonder if these sublime Doctors proceeded at last to violate what was sacred, and treated the Pentateuch of *Moses*, the Writings of *Solomon*, and the Revelation of St. *John*, as Descriptions of the Gold-making Art. There was nothing but what they debauched with their Commentaries, Allegories, Emblems, Types, and Riddles; insomuch that you can find no Passage in sacred Writ so clear, so plain and explicit, which they did not pervert to a wrong Sense; the fanatical Humour prevailing at last to such a Degree, as to change the History of Facts, and the Miracles wrought for Confirmation of the Gospel, into the Precepts and Maxims of Alchymy. He who considers these Things cannot but be concern'd, and, being prompted by Indignation, may perhaps be ready to condemn the whole Art, and wish it exterminated. But if he will please to assume the Character of an impartial Moderator, and can have Patience to hear the Truth on both Sides, he will be convinc'd, that all this numerous Train of Errors and Absurdities are very fairly condemned, exploded, and confuted by Chymists themselves, and that from Arguments and Reasons afforded by the Art of Chymistry. It would be endless to enter into Particulars, but I cannot forbear taking notice of an illustrious Chymist in the thirteenth Century, I mean *Roger Bacon*, an *Englishman*, who was excommunicated by the Pope as being guilty of Magic. This extraordinary Person knew so well how to reduce the Powers of Nature within the Rules of Art, as, by their Combination, to perform Things which far surpass'd the pretended Miracles of the Magicians. He demonstrates, by Experiments, that human Industry, with an Insight into Nature, can produce Effects, which they, with all their Charms, Sorceries, and Invocation of Demons, are unable to imitate. He very easily, and with admirable Ingenuity, exposes the monstrous and hurtful Superstitions, Deliriums, and Enthusiasms of the Times in which he liv'd. He very judiciously and religiously distinguishes between the sacred Mysteries of Piety, and the ridiculous Chimæras and Inventions of an unsettled Brain; between the corruptible Principles of the Body, and the celestial Origin of the Soul; between Nature and God. We admire such a Man, living in the very Dawn of Chymistry, and have a Veneration for him to this Day. Another Chymist of the same Nation was the illustrious *Boyle*, who was surpass'd by none for Diligence or Success in this Art. He spent his Life in soliciting Nature, and making Experiments; and with the greatest Freedom and Good-nature oblig'd others, by communicating those Discoveries, which himself alone, with incredible Pains, Danger, and Expence, had first made.

*Boerhaave* has, in this last Part of Mr. *Boyle's* Character, I think, carry'd his Encomium too far; for whoever reads his Works will find, that tho' Mr. *Boyle* communicates some Things, yet he mentions others, which he informs us are to be done, without telling us how. And it is well known, that he conceal'd some of his most important Discoveries from all the World, except perhaps his own Workmen, from whom he could not always hide them.

The Changes which happen in Bodies are caused by Motion, which is infused into the vast corporeal System, and agitates the same. We are therefore to inquire into the Causes of this Motion, and by what means it may be excited, diverted, or stop'd in Bodies. These impulsive Powers are not within the Reach of Reason, unassisted by the Observations of Effects evident to the Senses. It will then be worth our Pains carefully to observe those Motions, which arise from the Action of Bodies in the Vicinity of others, or to apply Bodies to Bodies, and again to remove them at a Distance from each other, while, by means of Fire, you excite in each Body a proper Motion, which is accounted the most effectual Method to discover the Virtues of Bodies. All this is the Work of Chymistry, which on that account must be acknowledg'd of great Service in the Bounds of Physics, there being none so well accommodated for discovering the Secrets of Nature; and yet it cannot be deny'd, but that it has been the Occasion of great Errors in searching into the Nature of Things. The principal Error was, that as soon as the Chymists had found out, by Experience, the Action which was peculiar to some single Body, they presently regarded this Way of Nature as universal, and confidently asserted it to belong to all other Bodies in general. In this Point the Chymists seem'd to copy after that Philosopher, who, observing the mutual Attraction between the Magnet and Iron, ascribed the same to all other Bodies. From this fallacious Way of Reasoning, the Doctrines of Ferments, Effervescences, opposite Salts, heating Sulphur, Fermentation, Putrefaction, Generation, Transmutation, Precipitation, became so universal, with an infinite Number of others deduced from them. How did the Face of Physics change, as soon as these few Actions were found out! None but these were admitted in explaining the Laws of Nature, and whatever could not be reconciled with it, was exploded; and in a little time the Notion so far prevailed, that all the Powers of Nature were circumscribed within the narrow Limits of

this way of Acting; and had not Chymistry itself set Bounds to this licentious way of Reasoning, all Physics had been reduced to depend on a few Laws established by the Chymists. But when Chymistry began in good Earnest to make Improvements of Inventions, to try the same Methods upon different Bodies, and to try different Methods upon the same Bodies, there appear'd so great a Dissimilitude in Bodies, and so much Disagreement in the Operations, as would no longer suffer the vast and comprehensive Nature of Things to be restrain'd within the Bounds of a few Examples. Men were then convinc'd, that there were in Bodies a Variety of Qualities, before unknown, but of mighty Efficacy, and productive of peculiar, but often very considerable Motions. We will illustrate this by an Example: Those Vegetables which turn acid of themselves, if kept in Vessels, will be put in Motion only by the Warmth of the Air; and this Motion, if continu'd to a proper Length of Time, will change Part of the native Oil into volatile Spirits, which will bear to be mix'd with Water, but burn in the Fire. Again, the same Vegetable, by a Motion not much unlike the former, shall change the same Part of its Oil into acetous Spirits, which will mix with Water, but extinguish Fire. They call'd both Actions *Fermentation*; there was a remarkable Change of Elements, such as they had never seen in any other Subject. Thus far Matters went smoothly; but here they fall into a loose way of Arguing, while they warmly insist, that there can be no true Change but by virtue of a Ferment, none without Fermentation. Having thus the Misfortune to overshoot themselves, tho' pleas'd and satisfy'd with their new Discovery, they take Occasion from thence to form a Notion of a far more universal Ferment, of so mighty and extensive Virtue, that the least Particle of it, united with the proper Ferment of any Body whatsoever, shall impregnate it in such a manner, as to assimilate and convert the Ferments of all other Things into its own Nature. Thus from the narrow Rounds of a single Experiment, they dare expatiate and range over an Infinity of Things. Nor must we imagine, that this is true only in one Instance; for there is scarce a Subject of any Importance, in which they do not argue at the same Rate. Hence it is, that there are such a Multitude of Sects among them, every one forming an universal Doctrine, peculiar to himself, and built upon his own private Experiments, so that you shall hardly find two of them agreeing in one Thing; while those among them, who were bred up to the Studies of Literature, but wanted Experience, rejecting the Doctrines of the Schools, and longing after Certainty, after they had apply'd themselves to Chymistry, were still doubtful and fluctuating, and, among such a Multiplicity of Opinions, knew not which of them to embrace. Chymistry groan'd under so great a Load, but still had Resources within itself, and there found Means again to emerge and free itself. None of the Sciences came in to its Assistance, but it was forced to work out its own Deliverance. Nor will this seem extraordinary to one who considers, that the Application of some Bodies to others always produced new Appearances, different Actions, dissimilar Effects, which could by no means be reduced to one universal Law common to all. Men were convinced from very noble, useful, and entertaining Inventions made by the Chymists, that there needed a vast Number of Observations, a very careful Examination of them, and a judicious and wary comparing of them one with another, in order to establish an universal Mode, to which all the Actions of Nature are subjected; that there is nothing more fallacious, than from a Similitude in one Thing to explain and judge all the rest; and that as it is usual for a young Beginner to deduce the Causes of all Events from one single Mode or Property, so mature Age, taught by Experience, takes up with true solid Wisdom, whose Dictates to a Chymist are, that he proceed by slow Steps, with the greatest Caution, and with the most solicitous Circumspection and Attention to every Particular, before he presumes to pass his Judgment upon natural Things. Thus is Chymistry, by correcting Errors, adorning Truths, and amending Abuses, become a certain, pure, most useful, and reputable Part of Learning. For the Truth of these Things I appeal to those who shall compare *Hamborg* with *Tachenius*; *Boyle* with *Helmont*; and the Writings of the vulgar Chymists with the *German Miscellanies*, and the Memoirs of the Royal Academy of *Paris*.

Physics have so near a Relation to Medicine, that the Errors of the Chymists in the former communicate themselves to the latter, corrupting not only the Theory, but the practical Part of Medicine. Give me Leave to point out the Original of so many Faults. The Chymists, by the artificial Means of a great Fire, with Vessels and Instruments, excited different Kinds of Motions, by which Bodies, being mix'd or separated in various Manners, assum'd different Forms, whence proceeded new Powers of acting undiscover'd before. Now when these Bodies came to be examin'd by a chymical Process, very many Kinds of Motion were discover'd, which no other Art was capable of producing, nor Nature, left to itself, had ever offer'd to Observation. The Artist had Reason to rejoice



over his Invention; but the Pleasure of the Success dulled the Mind of the Inventor; he ventur'd to assert, and at length assum'd it for a most certain Truth, that the same obtain'd in the Nature of Things, and in the human Body; that such Things as could not be produc'd in the Way of Art, but by the most intricate, most violent, and operose artificial Means, must result from the sedate Motions of the human Body, and be nourish'd and maintain'd by the same; and that all Things in the Earth, Water, and Air, were furnish'd with them. This was a most plentiful Source of Errors, and hence acrid alkaline, fix'd, and igneous Salts, were said to prevail in the Bodies of Animals and Vegetables; and volatile, highly acrid, and alkaline Salts, to impregnate the mildest Humours of the human Frame, as well as the most solid Parts, and to lodge themselves in the Teeth, and in the very Milk. Sometimes Acids were in highest Reputation, as being found not only in Fossils and Vegetables, but particularly in Man in such Quantities, as, by their corrosive Acrimony, to carry all before them. Hence the human Body was turned into a Chymist's Shop, or a Theatre, in which chymical Plays were acted, and Conflicts, Effervescences, Peace, Generation, Destruction, and various Effects of opposite Salts, were represented as on their proper Stage; and hence all Distempers were accounted for, and the curative Indications taken, in a manner too ridiculous to expatiate upon, tho' supported by the Authorities of *Sylvius de la Boe*, and *Tachenius*. It would be endless to recount all the Errors and Dreams with respect to Theory and Practice, which different Chymists gave into. What can be more whimsical than the Character of Antimony, which some of them represented as curing all Diseases, for no other Reason, but because, when fus'd with Gold, it destroys all the Impurities and baser Metals mix'd with it? What more absurd, and even contrary to his own Experience, than the Boasts of *Paracelsus* with respect to his secret Medicine, by which he promis'd himself the Age of *Methusalem*? What more ridiculous than the Extravagancies of the *Rosicrucians*? What more enthusiastic and idle, than the Liquor propos'd by *Van Helmont*, and prepar'd, as he says, from the immortal Cedar of *Lebanon*, by Art of the wise Men, which would so enrich the vital Humours with its salutary Virtue, that by purging off all Sordes, and supplying all Deficiencies, with proper Recruits of invigorating Spirits, it would cause a Man to live for Ages in the constant Enjoyment of a crude and vigorous old Age? You would say I transgress'd the Bounds of Probability. But if I should tell you of *Butler's Stone*, which, by one slight Touch of the Top of it with the Tip of the Tongue, instantly cured the most obstinate Diseases; or of *Artepheus*, by an electrical Virtue, attracting to himself the vital Spirits from a youthful Body, and perpetually sustaining the vital Flame with its medicinal Exhalations, render'd it immortal as the vestal Fires; and of many other vain, empty, fabulous Vanities of the Chymists, I should exhaust your Time and Patience. Yet these Things, absurd and incredible as they are, became the Regard and Concern of Physicians; in Search of these, many of the wisest and most learned among them devoted their Estates, Fame, Life, and Soul; and the Infatuation became so general, as hardly to admit Hopes of a Remedy. Chymistry itself, at last, furnish'd us with the only proper Means for the Cure of those Evils, to which itself had given Occasion. *Libavius*, *Boyle*, *Bohnus*, and very many others, searching diligently into Things, and leaving nothing unexplor'd, came at last to demonstrate, from Chymistry itself alone, that the Things which Art prepares, are quite foreign to those which Nature effects; and consequently that the Instruments which Nature uses, and those which Chymistry employs, are not to be considered as of one and the same Kind. For Nature, in Man, does not work by all those Ways and Means which Chymistry uses to bring about its Ends; and therefore the Actions exercised by the industrious Chymist are vastly different from those by which Nature proceeds; and that we are not to argue from one to the other without good Evidence derived from elsewhere. Hence it appeared, that Chymistry often produces such Effects as were never discover'd in the human Body, nor in any other Part of Matter; that it was wrong arguing from the Depuration of Metals, to the rendering a Man free from Diseases. The World was convinc'd, that the Methods, by which the Life of Man supplies Matter for the Causes of Diseases, are altogether inimitable by the Arts of Chymistry; and that Life and Health depend upon so many different, intricate, subtle, and tender Causes, that Chymistry was utterly incapable of performing the wonderful Things she had promised on that Score. All these Errors, with an infinite Number of others, after Conviction from true Experience, were happily corrected, and expel'd the Bounds of Medicine; and now we have Reason to congratulate ourselves on the flourishing State of Chymistry in Europe, which is no longer accounted a fallacious, but a very useful Art, and of the greatest Service in Physics and Medicine; in Confirmation of

which, besides the Authority of the great Restorer of Learning, my Lord *Bacon*, and that sagacious Chymist Mr. *Boyle*, hear the Testimony of a Man, in whom Nature seems to have set the Bounds of human Perspicacity, I mean the incomparable *Newton*, who, tho' of the deepest Insight of any mortal in Physics, yet demonstrates the Laws, Actions, and Forces of Bodies as known by their Effects, all from Chymistry; and when he applies those Forces, thus found, to the Explication of Phenomena, he does it all by the Help of Chymistry; which is a clear Proof, that without Chymistry the Nature and Properties of single Bodies could scarce ever have been known by the most perspicacious of Mortals.

CHYMICAL AUTHORS, including ALCHEMISTS and METALLURGISTS.

We have an Account of several Greek chymical Manuscripts in the Emperor's Library at *Vienna*; that of the King of *France* at *Paris*; the *Elizabeth* Library at *Breslau*; that of the Duke of *Saxe-Gotha*; and in the Libraries of the *Escurial*, and the *Bodleian*. Dr. *Shaw*, in his Translation of *Boerhaave's* Chymistry, has, by way of Note, given a Catalogue of these Writings, which the Reader may consult; or *Fabricius*, in his *Bibliotheca Græca*, who takes notice of these Authors. Mean time it would be superfluous to particularize them in this Place, because they are not to be procur'd. I shall, however, give the Judgment of the learned *Reinesius*, on that Collection in the Duke of *Saxe-Gotha's* Library.

*The Judgment of the learned Reinesius, concerning the Collection of Greek chymical Manuscripts, in the Library of Saxe-Gotha, A. D. 1634.*

The Greek Manuscript Copy, transcrib'd from another Copy in the Library of *Ausbourg*, in the Year 1623. consists of a Variety of Treatises, some of which bear the Names of their true and undoubted Authors, others are ascrib'd to those who knew nothing of them, and others again are nothing but Collections from various Authors. They all treat of what they call the *Divine Art*, of the Philosophers Stone, or the Great Magistery, that is, how imperfect Metals may be brought to Perfection by Transmutation into Gold or Silver; also of the various Kinds of Vessels and Furnaces, and the different Operations which are in Use among Chymists at this Day. There is also a brief Treatise of Weights and Measures, with a short Account of the Manner of preparing *Polenta* from Barley, and how they make Beer, in *Egypt* he must be suppos'd to mean; also of the Degrees of Fire, Colours, and other common Operations belonging to Chymistry. And because this Art was at all times communicated in allegorical Words, by Parables and Riddles, which *Zosimus* calls *λογαὶ γεγραμμένοι*, "figurative Writings," and *Stephanus*, *ἀλληγορικάς*, allegorical," and was expressed and described by certain Characters and Signs, there is added a Lexicon, which shews what is meant by those Words which in Greek Authors have a very different Sense, and explains the Characters and Signs.

There is also a Manuscript Copy taken from another, which, they say, is extant somewhere in *Italy*, and quoted by *Robertus Valensius*, in his Book of the Verity and Antiquity of the chymical Art, and by *Gesner* in his *Bibliotheca*; or from that which is in the most Christian King's Library, and quoted by *Isaac Casaubon* on the Annals of *Baronius*, and by *Salmasius*, in his *Exercitationes Plinianaæ*, whose Quotation answers Word for Word to this Manuscript. And *John Dee*, a Doctor of Physic in *London*, who dedicated his *Monas Hieroglyphica* to *Maximilian*, King of the *Romans*, A. D. 1564. is said to have had a Manuscript Copy of the Physics of *Democritus*, with Notes by *Synefius*, *Pelagius*, and *Stephanus*; which Treatise was translated by *Pizimentius* into *Latin*, and printed at *Cologne*, A. D. 1574. with *Mizaldus's* *Memorabilia*. But then these Writings are all or most of them translated into *Latin*, and inserted \* in the *Theatrum Chymicum*, the *Turba Philosophorum*, the *Aureum Vellus*, and other Books of that Kind. Tho' *Democritus's* Physics and Magic are quoted by *Hermolaus Barbarus* on *Dioscorides*; the Epistle of *Pfellus* to *Xiphilin* the Patriarch is cited by *Mylius*, in his *Basilica Philosophica*, and the Works of *Zosimus*, the Praxis of *Stephanus*, and other Pieces, are cited by some or other; yet they were never printed in *Greek*, as far as I know, tho' they certainly deserved it, because they contain many valuable Things of Antiquity, and inform us of the Beginning of the Art at so long a Distance of Time. As to the rest, because they are very obscure, and consist merely of Fragments, they will conduce perhaps but little to the Promotion of Chymistry. In general, it may be said of these Writings, that they were all composed by Monks, and other learned Men, first of *Alexandria*, and after some Distance of Time at *Constantinople*; were there collected into one Body, and brought from thence into *Italy* by the *Constantinopolitan* Exiles, who flock'd thither in great Number some time before, and at the Taking of

\* *Fabricius* says, that very few, or none of them, can be found inserted in those Collections.



*Constantinople* by the *Turks*, *A. D.* 1454. and afterwards brought into *France*, and placed in the Royal Library.

That we may say something in particular of the Writers whose Names are extant in this Collection, it is to be observed, that some of them were Heathens, others Christians \*; that they lived first at *Athens*, afterwards at *Alexandria* in *Egypt*, where Philosophers were more esteem'd than at *Athens* itself. For, before that Time, both there and in *Persia*, the Art of making Gold was much studied among *Jews*, *Christians*, and *Heathens*, in the Reign of the Emperor *Dioclesian*, as *Suidas* informs us under the Word *χημεία*. And we are assured, that *Heliodorus*, whose Name is prefix'd to one of these Treatises, was an *Alexandrian* by Descent; and was, with his Brother *Ammonius*, placed by his Parents, *Hermias* and *Ædesia*, with *Proclus* the most famous Philosopher of those Times, but later than *Theodosius*. And possibly this Philosopher, who was addicted to this Art, and had some Skill therein, might dedicate some Writing of that Nature to *Theodosius* the Great; and it is probable, that this Emperor took great Delight in it, as well as many belonging to his Court, and among them *Eugenius*, to whom one Process is ascrib'd. The Names of *Archelaus*, *Hierotheus*, and *Theophrastus*, are all fictitious; and the bad Poetry belongs all to one Author, being nothing but *Stephanus* versify'd. It is certain also, that this *Heliodorus* before-mention'd was a Pagan of the *Platonic* Sect, but the Author of these Verses a Christian; and *Pappus*, to whom one Process is inscrib'd, was a Philosopher of *Alexandria*, Author of the *Mathematical Collections*, and lived under the said Emperor *Theodosius*.

As to *Synefius*, whose *Scholia* on the *Physics* of *Democritus*, and *Mystica* to *Dioscorus*, the Priest of the great *Serapis*, we have amongst them; there was, it is true, a *Synefius* in the Time of the *Theodosii*, who studied at *Athens* and *Alexandria*; and *A. D.* 410. was made Bishop of *Cyrene* in *Libya*, and whose Works were publish'd by *M. Petau*, 1633. at *Paris*, with Notes. But this *Synefius* cannot be thought the Author of the *Scholia*, because they contain a very childish Error, concerning *Ostanes* and *Democritus*, of which more below; whereas *Synefius* was a very learned and judicious Person, as appears by his Writings, in which there is not the least Footstep of Chymistry, nor of his Familiarity with *Dioscorus*. *Zosimus*, a Philosopher of *Alexandria*, wrote about the same Time, and has various brief Discourses interspersed throughout the Volume, which, however, cannot be all of them justly ascrib'd to him; for in some there is mention made of Things unknown to the antient *Greek* Physicians, and which were brought in Use and named only by the *Persians* and *Arabians*, such as *βελιζγ*, *νατρη*, *θένακαρ*, and others. That this *Zosimus* was the same with the Historian of that Name, can hardly be doubted; for tho', in his Treatise *ad Theopsebian*, he makes mention of the Creation, Incarnation, and Passion, yet he accommodates the *Platonic* Speculations, and the Fables of the antient *Egyptians*, taken out of the *Parmander* of *Trismegistus*, to his Art; and apply'd the prophetic Vision of *Ezekiel*, concerning the dispersed dry Bones, to his chymical Processes. *Suidas* mentions *Zosimus*, and says, that he wrote *χημειτικά*, and calls him an *Alexandrian* Philosopher; and *Photius*, in his *Bibliotheca*, speaks of his *λόγοι χημειτικοί*. In some Places of this Manuscript he is call'd, perhaps from his Country, *Panopolita*.

*Olympiodorus*, whose Treatise is in this Manuscript, wrote after *Zosimus*; but *Salmasius* seems to be mistaken in placing him among the Writers of the last Ages of *Greece*, because he never mentions *Stephanus*, who flourish'd about *A. D.* 620. and was skill'd in this Art; but frequently speaks of *Zosimus* and *Synefius*, who lived a little before; whereas it is a received Custom among Writers on these kinds of Subjects, to mention, and quote by Name, all their Predecessors in the same Art. I take this *Olympiodorus* to be the same with him of that Name who was born at *Thebes* in *Egypt*, and wrote a History of his own Times from *A. D.* 400. to *A. D.* 425. and dedicated it to *Theodosius* the younger. In *Folio* 182. he quotes *Hermes*, ἐν τῇ κρυπτικῇ βιβλῳ, which is the same with *Hermes's* *Physics*, quoted by *Zosimus*, *Lib.* 9. *de Chymia ad Theopsebian*. Now the Name *Kyranidum* signifies a Volume compil'd from many others; and because the *Persians* and *Arabians* compos'd this Book out of the magical Treatises of their own and other Nations, they call'd it *Curanon*; as the *Alcoran* is, by the later

*Greeks*, call'd *κρυπτικόν*, that is to say, a Collection of divine Precepts. And we are told by *Suidas*, that *Dioclesian*, besides abolishing the antient *Egyptian* Supputation of Time, order'd the Books of the *Egyptians*, which treated of the Art of making Gold, to be burnt, that he might deprive them of the Means of rebelling; and did the same, as far as his Power reach'd, by the Books of the *Persians*, which treated of the same Art, that was, at that Time, very much cultivated in *Persia*, and enabled that Nation frequently to be very troublesome to the *Romans*.

*Stephanus* was a Christian, as appears by his quoting the Evangelists and *St. Paul*. He lived in the Time of the Emperor *Heraclius*, and there is no Part in all the Collection, in which the Doctrines of the Antients are better explain'd.

As to *Democritus*, who is not only frequently mention'd in this Collection, but has, besides, entire Treatises in it, as his Book of the Colour of Purple, and of making Gold, Silver, and Gems, there is an antient, indeed, but foolish Opinion, that he is the same with the Philosopher of *Abdera*, who lived in the Time of the *Persian* Monarchy. The *Pseudo-Synefius* says so in express Words; and you may find the same in the *Greek Chronicle* of *Eusebius* †. But *Scaliger* thinks that Story to be none of *Eusebius's*, but compos'd by *Panodorus* the Chronographer, an *Egyptian* Monk, who lived in the Time of the Emperor *Arcadius*; and being extracted by *Syncellus*, who transcrib'd that Author's whole Chronography, about the Year 792. was inserted into that Collection. But it is very probable, that it was not written by *Eusebius*; for *St. Jerom* found no such thing in that Author; and the Tale is most likely to be forged by an *Egyptian*, who thought it an Honour to his Nation to have it believed, that the most famous of the *Grecian* Sages should be initiated in the *Egyptian* Mysteries. But this *Ostanes*, as appears by a Fragment, *Fol.* 66. was a Christian; and consequently the *Democritus*, to whom these Works are ascrib'd, could not be the Philosopher of *Abdera*. And, tho' any one should object, what I also believe, that this Fragment was falsly and absurdly ascrib'd to *Ostanes*, yet it appears, from the Style, that the Book before-mention'd could never be the Work of so antient a Philosopher. However, the Piece is of some Antiquity, and the Product of an Author who had a good Insight into the Nature of Minerals, and was skilful in Medicine; and perhaps it was some Person of this Name, who, before *Constantine* the Great, said to have been an Initiate of *Democritus*, in the Time of King *Sapor*, (the same who, in the Collection, *Fol.* 85. is call'd *Sophar*) went into *Persia* with a Design to learn the sacred Art. Now *Sapor* lived to the Year of our Lord 270. whence we may probably conjecture, that this *Democritus*, about *A. D.* 300. and consequently the Third of that Name, might be making the Tour of *Egypt*. Perhaps, again, whatever is related by *Synefius* and others of *Ostanes* and *Democritus* is merely fabulous, and those Pieces belong to other Authors, who, to gain Reputation to their Works, prefix'd to them the Names of those antient Philosophers, who were most celebrated for their Knowledge in the occult Sciences. Nor is it strange, that, in so rude and simple an Age, these Writings should be father'd upon that very antient natural Philosopher *Democritus*, and should pass for genuine, since something like it happen'd in the Time of *Pliny*, as appears, *Lib.* 24. *Cap.* 17. and *Lib.* 30. *Cap.* 1. And in *Laertius's* Life of *Democritus*, *Gellius*, *Lib.* 10. *Cap.* 12. and *Columella*, *Lib.* 7. *de R. R.* we are inform'd, that the Memoirs of *Bolus Mendotus de Re pecuaria* were falsly ascrib'd to *Democritus*; so that many Persons endeavour'd to recommend their own absurd and monstrous Conceits to the Public, under the celebrated Name of *Democritus*. The same thing happen'd to *Hermes Trismegistus*; and Poets who lived five, six, or seven hundred Years after *Seneca*, prefix'd his Name to their Verses.

The same Judgment is to be form'd of *Cleopatra*, whom these Writers make to be the Wife of one of the *Ptolemies*, Kings of *Egypt*, and *Stephanus* introduces talking with *Ostanes*; for how can it be ascrib'd to *Cleopatra*, or the antient *Geoponic* Writers, when it mentions the thirty Pieces of Silver, for which *Judas* betray'd our Saviour; and says, that *Job* labour'd under his Calamity seven Years and a half?

*Michael Psellus* is known to have lived at *Constantinople*, *A. D.* 1080. and to have been one of the most learned Men

\* As it appears, that the Compiler lived after the Emperor *Heraclius*, was a Christian, and not only extracted and digested, from various Authors, what he thought fit, but also made Interpolations of his own, neither the Marks of Christianity, nor of the Times, which we every-where meet with in his Collection, nor yet the quoting of the Authors, are a sufficient Warrant to conclude any thing with Certainty, concerning the Age or Religion of those, whose Names are prefix'd to the Extracts. Since, then, neither *Herodotus*, nor *Clement Alexandrinus*, nor other antient Writers, who treat of the Learning of the *Egyptians*, nor even *Pliny* himself, make the least Mention of Chymistry, I am entirely of Opinion, with *Conringius* and *Reinsius*, in Opposition to the very learned *Borrichius*, that whatever may be pretended in this Collection to be written by Names of the greatest Antiquity, has, at most, no higher Original than the Times of *Dioclesian* and the *Theodosii*. *Fabricius*.

† *Democritus*, the *Abderite*, was initiated into the *Egyptian* Mysteries by *Ostanes* the *Mede*, sent into *Egypt* by the *Persian* King, to preside in sacred Offices, in the Temple of *Memphis*, with other Priests and Philosophers, among which was *Mary*, a *Hebrew* Female Sage, and *Pammenes*. He wrote of Gold, Silver, Gems, and Purple, in a figurative manner. This *Democritus* and *Mary* were commended by *Ostanes* for concealing their Art under a Multitude of subtle Enigmas; but he blamed *Pammenes* for being too open and free in his Writings. *Chronicon Syncelli*.



of Greece in his Time, and wonderfully delighted with occult Arts and Sciences. He wrote a Multitude of Books, many whereof lie dormant in Libraries.

The Author of the *Lexicon* must be reckon'd among the Moderns, who lived about two hundred and fifty Years ago.

So far *Reinesius*. I now proceed to give some Account of the Authors, whose Works are more known; first remarking, that many Circumstances, mention'd by *Reinesius*, seem to favour what I have suggested in the Beginning of this Article, relative to the Origin of the Notion of the Transmutation of Metals.

I. *GEBER*, call'd the *Arab*, but really a *Greek* by Country, according to *Leo Africanus*; having first been a Christian, but afterwards turn'd Mahometan. He lived in the seventh Century, and wrote in *Arabic*.

This Author appears to have been the first great Reformer and Improver of Chymistry. His History is very obscure: The Name *Geber* signifies a great Man, and a King; whence he is commonly supposed to have been a Prince, and, as he wrote in *Arabic*, a Prince of *Arabia*. But neither his Person, nor the Time he lived in, is known with any tolerable Certainty.

He is supposed to have given the first Handle to an Inquiry after an universal Medicine, there being some Expressions in his Book, which might easily enough lead an unwary Reader to think he was acquainted therewith: As, *Gold, thus prepared, cures Leprosy, cures all Diseases, &c.* But we are here to observe, that, in his Language, the baser Metals are leprous Men, and Gold a healthy one. When, therefore, he says, *I will cure six Lepers*, he means no more, than that he will turn them into Gold, which shall bear the Trial of Antimony. But, as he was no Physician, it is more than probable he never thought of any universal Remedy. After this Writer, we don't meet with any other of Distinction till the twelfth Century.

*Golius*, Professor of the Oriental Languages in the University of *Leyden*, made the first Present of *Geber's* Piece, in Manuscript, to the public Library; and translated it into *Latin*, and publish'd it in the same City in *Folio*, and afterwards in *Quarto*, under the Title of *Lapis Philosophorum*. It contains abundance of curious and useful Things about the Nature of Metals, their Purification, Fusion, and Malleability, with excellent Accounts of Salts, and *Aquæ-fortes*. Several of his Experiments are verified by the present Practice, and have pass'd for modern Discoveries: The Exactness of his Operations is really surprising, except perhaps in what relates to the Philosophers Stone.

His Works are these;

*De Alchemia, vel Chimia; aut de investigatione perfectionis Metallorum:*

*De Summa Perfectione Metallorum:*

*De Claritate Alchimie:*

*De Lapide Philosophico:*

*De Testamento:*

*De Epitaphio:*

*De inveniendâ Arte Auri & Argenti.* Boerhaave.

To these *Dr. Shaw* adds,

*Geberi super Artem Alchymie Libri vi.* Or, *Geber's* six Books on the Art of Alchemy; extant, in Manuscript, in the *Bodleian Library*, Part of the Donation of *Elias Ashmole*, Esq;

*De Alchimia Libri 3.* Argent. 1529. Fol.

*Geberis summa perfectionis magisterii in sua natura:* Venet. 1542. 8vo. Norib. 1545. 4to. c. Fig. Arg. 1598. 8vo.

*Chymia, seu traditio summæ perfectionis, & investigatio Magisterii:* Lug. Bat. 1668. 12mo.

The Works of *Geber* are also publish'd in *English* by *Richard Russel*, London, 1686. 8vo.

In the next Place might come *AVICENNA*, who lived in the eleventh Century; and who, as his Follower *Soranus* informs us, wrote a Book on Alchemy; but there are more chymical Pieces that go under his Name, viz.

*Abohali*, (i. e.) *Avicennæ liber de Rebus Alchymicis*; (i. e.) *Abohali's*, or *Avicenna's* Book on the Subject of Alchemy; extant, in Manuscript, in the *Bodleian Library*, given by Sir *Kenelm Digby*; besides another Copy given by *Elias Ashmole*, Esq;

*Tractatus de Tinctura Metallorum.* Franckfort. 1550. 4to. Chemicus liber, porta elementorum dictus: Basil. 1572. 8vo.

*Mineralia, seu de congelatione & conglutinatione Lapidum:* Publish'd with *Geber's Summa perfectionis magisterii in sua Natura*; and other Pieces on the same Subject, Venet. 1542. 8vo. Also in the *Theatr. Chym. T. iv. p. 986.* And in *Mangel's Bibl. Chym. T. 1. p. 636.*

The next Author is *MORIENUS*, a *Roman*, who lived as a Hermit at *Jerusalem*. He wrote very gravely on the Transmutation of Metals, and is rank'd amongst the purest Authors extant: His Works were translated out of *Arabic* into *Latin*, so early as the Year 1182. according to *Boerhaave*.

*Dr. Shaw* adds to this,

*Liber de Compositione Alchemie*; extant in *Mangel's Bibl. Chym. T. 1. p. 509.*

*Liber de distinctione Mercurii aquarum:* Found in Manuscript in the *Bodleian Library*; given by *El. Ashmole*, Esq;

The next is *ALBERTUS BOLSTADIUS*, surnamed *Grötus*; commonly known by the Name of *Albertus Magnus*. He wrote upwards of twenty Volumes in *Folio*; and is said to have been, at first, distinguish'd by his Dulness and Stupidity, inso-much that he became the common Jest of his Fellow Students. At length, quite tired out, he resolv'd to scale the Walls of the Convent, and run away. In this Attempt the blessed Virgin appear'd to him on the Wall, and there gave him that Understanding and Ability, which have since render'd him so famous. He was a *Dominican* Friar, and Doctor of *Paris*, flourish'd in 1236. and taught at *Cologne*, where he had *Thomas Aquinas* for his Pupil. He retired from his Bishoprick to his Monastery at *Cologne* in 1263. and died in 1280. aged seventy-five. Father *L'Abbé* says, in his *Eloge*, that he wrote sixty Volumes, most of them still extant, many in Print, the rest in Manuscript. *Petr. Jammy* has publish'd an Edition of his Works, but not all, in twenty-one Volumes, *Fol. Lugdun. 1651.* The List of Titles in each Volume is given by *Fabricius*, p. 113. &c. He was accused of Magic; but is defended by *Trithemius*, *Mirandula*, *Naudé*, and others. By a general Correspondence with the Miners throughout *Germany*, he acquired uncommon Skill in Metallurgy. The Feast of the beatified *Albertus* is celebrated in the Churches of *Ratisbon* and *Cologne*.

His Alchemistical Works are;

*De Mineralibus & rebus Metallicis, Lib. v. Oppenheimii,* 1518. 4to. Argent. 1541. 8vo.

*Lilium floris de Spinis avulsis.*

*Speculum Alchemie de Compositione Lapidis, &c.*

There is also a small Piece of his upon Alchemy; intitled *de Alchymia libellus*; printed at *Basil* in 1516.

Next, after *Albertus*, might come *THOMAS DE AQUINA*, a *Dominican*, born of the noble Family of the Counts of *Aquinas*, in 1234. He died in his Journey to the second Council of *Lyons*, whither he had been summon'd by Pope *Urban IV.* in the Monastery of *Fossa Nova*, not far from *Terracina*, in 1274. His Chymical Writings are,

*Secreta Alchemie magna, de Corporibus supercaelestibus, & quod in Rebus inferioribus inveniantur, quoque modo extrahantur:*

*De Lapide minerali, Animalis & Plantalis:*

*Thesaurus Alchemie secretissimus, quem dedit Fratri suo Reinaldo:*

To which are added, *Johan. de Rupefissa's Book of Light*; and *Raym. Lully's Clavicula & Apertorium*, publish'd by *Dan. Bronchusius*, with a Preface by *Joh. Heurnius*, Lug. Bat. 1598. 8vo. It is in the *Theatr. Chym. T. 3. p. 277.*

*Aurora, sive Aurea Hora:*

*Commentarium super turbam Philosophorum breviorum, ut dicitur:* Extant in the second Decad of the *Harmon. Chym. Philosophica*, collected by *Jos. Rhenanus*. Francof. 1625. 8vo.

He was succeeded by *ROGER BACON*, an *Englishman*, a Monk of *Westminster*, but residing at *Oxford*, where he flourish'd about the Year 1226. He excel'd in Alchemy, Chymistry, natural Magic, Mechanics, Metaphysics, Physics, and Mathematics. He died at *Oxford* in 1284. and was buried there among the *Franciscans*. Such of his Works as have been handed down to us, are generally written in a clear easy Style, without Circumlocutions.

He was, beyond all Comparison, the greatest Man of his Time; and might, perhaps, stand in Competition with the greatest that have appear'd since. 'Tis wonderful, considering the ignorant Age wherein he lived, how he came by such a Depth of Knowledge on all Subjects. His Writings are compos'd with that Elegance, Conciseness, and Strength, and abound with such just and exquisite Observations on Nature, that, among all the Chymists, we don't know his Equal.

He writ many Treatises, some of which are lost, or lock'd up in private Libraries. What relate to Chymistry, are principally two small Pieces, wrote at *Oxford*, which are now in Print, and the Manuscripts to be seen in the public Library of *Leyden*, having been carried thither, among *Vossius's* Manuscripts, from *England*. In these he attempts to shew, how imperfect Metals may be ripen'd into perfect ones. He adopts *Geber's* Notion, that Mercury is the common Basis of all Metals, and Sulphur the Cement; and shews, that it is by a gradual Depuration of the mercurial Matter, and the Accession of a subtle Sulphur, that Nature produces Gold; and that if, during the Process, any other third Matter happens to intervene, beside the Mercury and Sulphur, some other baser Metal will arise; so that, if we could but imitate Nature's Method, we might change other Metals into Gold.

Having compared several of *Frier Bacon's* Operations with the modern Experiments of *M. Homberg*, made by Direction of



of that curious Prince the Duke of *Orleans*, we judge, that *Bacon* has describ'd some of the very Things which *Hamborg* publishes as new Discoveries. Thus, for Instance, *Bacon* teaches expressly, that if a pure Sulphur be united with Mercury, it will produce Gold; on which very Principle M. *Hamborg* has made many Experiments for the Production of Gold, described in the *Memoires de l'Academie Roy. des Sciences*.

His other physical Writings shew no less Genius, and Force of Mind. In his Treatise, *Of the secret Works of Art and Nature*, he shews, that a Person, who was perfectly acquainted with the Manner which Nature observes in her Operations, would not only be able to rival, but surpass her. In another Piece, *Of the Nullity of Magic*, he shews, with great Sagacity and Penetration, whence the Notion sprung, and how weak all Pretensions to it are. Admiration, the Parent of Magic, is the Off-spring of Ignorance, begot upon a vitiated Imagination: When weak Minds perceive an Effect, whose Cause is hid far in the Dark, they presently have recourse to a Demon to solve the Difficulty; for they fancy it must be the Effect of magical Art, or the Intervention of some supernatural Power. This popular Refuge of Ignorance the judicious Author deservedly confutes, and shews, there is no such thing as Magic; unless by that Word he meant a Knowledge of the Properties of Bodies, and the Methods of Nature; by a dextrous Application whereof many Things may be produced, more surprising than all the pretended Magic has ever effected.

Such was the Scope and Tendency of his Writings. What Reward he met with, is abominable to say: The Man, who had thus overthrown the idle Pretensions of the Believers in Magic, was himself branded for a Magician, excommunicated, and imprison'd.

His Works are printed in 8vo. and 12mo. under the Title of *Frater Rogerius Baco de Secretis Artis & Naturæ*, and in *Folio* at *London*. From a repeated Perusal of them, we find our Frier was no Stranger to many of the capital Discoveries of the present and past Ages.

Gun-powder he certainly knew: Thunder and Lightning, he tells us, may be produced by Art; for that Sulphur, Nitre, and Charcoal, which, when separate, have no sensible Effect, yet, when mix'd together in a due Proportion, and closely confin'd, and fired, they yield a loud Report. A more precise Description of Gun-powder cannot be given in Words; and yet a Jesuit, *Barthol. Schwartz*, some Ages after, has had the Glory of the Discovery. He likewise mentions a Sort of inextinguishable Fire, prepared by Art; which shews he was not unacquainted with Phosphorus. And that he had a Notion of the Rarefaction of the Air, and the Structure of an Air-pump, is past Contradiction.

#### A CATALOGUE of Frier BACON's Writings.

*Traclatus duo de Chemia.*  
*Speculum Alchemiæ.*  
*Thesaurum Chymicum.*  
*De secretis artis atque naturæ operibus, & de nullitate Magiæ.*  
*Specula Mathematica.*  
*Medulla Alchemiæ*, in 8vo. Ann. 1608.  
*De Arte Chemia scripta.*  
*Breviarium de dono Dei.*  
*Verbum abbreviatum de Leone Viridi.*  
*Secretum secretorum naturæ, de laude lapidis Philosophorum.*  
*Traclatus trium verborum.*  
*Epistola de modo miscendi.*  
*Epistola secretissima de ponderibus.*  
*Speculum secretorum.*  
*Opus majus, ad Clem. IV.*  
*Rog. Baconis epistolæ de secretis Operibus artis & naturæ, & de nullitate Magiæ. Opera Joh. Dee Londin. è pluribus exemplaribus castigata olim, & ad sensum integrum restituta. Nunc vero à quodam veritatis amatore in gratiam veræ Scientiæ emissæ, cum notis quibusdam, partim ipsius Joh. Dee, partim edentis. Cum responsione ad fratres Rosaceæ crucis illustres. Hamb. 1618. 8vo.*

In his Works we find many elegant Discoveries in Mechanics, Natural Magic, and other Arts, which have been falsely attributed to later Authors, and were no less falsely charg'd on him as the Effect of Magic and Heresy.

GEORGE RIPLEY, an *Englishman*, and Canon of *Bridlington*, lived in the Reign of *Edward* the Fourth, to whom, in the Year 1577, he dedicated his Book intituled *The twelve Gates*. His Writings are all very good in their Kind, being wrote in *Bacon's* Manner, only more allegorical. As he was no Physician, he does not meddle with any Medicinal Preparations; but treats much of the Cure of Metals, which, in his Language, is the Purification and Maturation thereof. He pursued *Geber's* and *Bacon's* Principles very religiously; and maintained, for Instance, with new Evidence, that Mercury is the universal Matter of all Metals; that this, exposed to the Fire with the purest Sulphur, will become Gold; but that if either of them be sick or leprous, that is, infected with any Impurity, instead of Gold, some other Metal will be

produc'd. He adds, that as Mercury and Sulphur are sufficient for the making of all Metals, so of these may an universal Medicine, or universal Metal, be produc'd, for curing all the Sick, which some have inadvertently understood of an universal Medicine, efficacious in all Diseases. 'Tis said, that *Ripley* sent an hundred thousand Pounds, for several Years successively, to the Knights of *Rhodes*, to enable them to defend themselves against the *Turks*.

His Works are,  
*Duodecim Portæ.*  
*Medulla Chimica.*

A Piece on Alchemy, composed in *English* Verse, and now preserved in the Library of *Leyden*. His Works were publish'd together at *Cassel*, in 8vo. 1649.

*De Mercurio Philosophorum*; or, A Piece on the Mercury of the Philosophers: And *Commentarium Hermesi Philosophi*, now in Manuscript in the Library of *Leyden*.

*Pupilla Oculi*, with a Preface, preserv'd in Manuscript in the *Bodleian* Library, given by *Elias Ashmole*, Esq;

*De Regimine ignium Philosophorum, & quibusdam probatissimis experimentis*; that is, Of the Management of the Fires of the Philosophers, together with some approv'd Experiments; found in Manuscript in the *Bodleian* Library, part of the Donation of the same Person.

He was succeeded by ARNALDUS DE VILLA NOVA, who was a *Frenchman*, and denominated *Arnaud de Ville Neuve*, from *Ville Neuve*, the Place of his Nativity. He was a celebrated Philosopher, Physician, and Chymist, and thought to be deeply skilled in Alchemy. *Van Helmont*, a great Admirer of *Arnaud*, attributes to him the first introducing of Chymistry into Medicine. He was sent by *Frederic*, King of *Sicily*, to cure Pope *Clement* the Fifteenth; but, being shipwreck'd in the Voyage, dy'd in 1313. and was bury'd at *Genoa*. The *Spaniards* maintain he was a *Catalan*. 'Tis certain he practis'd Physic at *Barcelona*, whence he acquir'd the Surname *Catalanus*. He was suspected of Magic.

His Works are,  
*Rosarium.*  
*Testamentum novum præticum.*  
*De Alchemia.*  
*Semita Semitarum.*  
 To these may be added,  
*Rosa Novella.*  
*Epistola ad Papam Pium.*  
*Novus splendor, vel Lumen.*  
*Flos florum.*  
*De Furno Philosophico.*  
*De Secretis Naturæ.*  
*De nova compositione Lapidis vitæ Philosophorum.*  
*De Principiis naturalibus, ad Clementem Papam.*  
*Opus in Arte majore.*

Besides these, we have, of his Writings,  
*Speculum Alchemiæ, quo artis Chimiæ Mysteria, etiam Secretissima, luculenter enodantur & explicantur.* First publish'd by *Jer. Megiserus*. *Francos.* 1602. 8vo. Afterwards, together with his other Chymical Works, by the same Editor. *Francos.* 1603. 8vo.

*Opera, unâ cum ipsius vitâ, à Symphor. Campegio descripta; ac tractatus de Lapide Philosophorum.* *Lugd.* 1530. 8vo.

*Opera, cum Nic. Tawcelli annotationibus.* *Bas.* 1585. Fol.  
*Thesaurus Thesaurorum.* The Treasure of Treasures. Preserved in Manuscript in the *Bodleian* Library, Part of the Donation of *Elias Ashmole*, Esq;

*Tracl. de Solutione dubiorum in Alchemia*: Or, Of the Solution of Doubts in Alchemy. In Manuscript, extant in the same Library. Given by Sir *Kenelm Digby*.

RAYMUND LULLY, a *Spaniard*, born at *Barcelona* in the Year 1235. a Disciple of *Arnaldus de Villa Nova*, died in *Africa* in 1315. He was one of the first who, in his Treatise intituled *De Quinta Essentia*, wrote of an universal Remedy for all Diseases of the Body, and of the Philosophers Stone.

This Author is said by others to have been born in *Majorca*, and by some in *Minorca*, but sprung from the noble Family of the *Lullies* in *Barcelona*. His Contemporaries speak of him as a Person eminently versed in the Peripatetic Learning; which, indeed, appears from several of his Writings. He had the Address to introduce a new kind of transcendental Art, call'd from him *The Lullian Art*, by virtue whereof a Man might dispute whole Days upon any Topic in Nature, without understanding any thing of the Matter. But at length, perceiving the Vanity of his own Art, he quitted this barren Superfluity of Words, and went over to the other Extreme.

Upon applying himself to Chymistry, he soon began to preach another sort of Doctrine; for, speaking of that Art, he says it is only to be acquired by Experiment, and cannot be convey'd to the Understanding by idle Words and Sounds.

*Lully*, besides what he did in the scholastic Way, writ several Volumes after changing his manner of Study: 'Tis difficult to say, how many; for it was a common Practice with his Followers to publish their Performances under their Master's Name. His

later



later Works are, beyond all Expectation, excellent; so that it may be doubted whether they were the Production of that Age. So full are they of the Experiments and Observations which occur in our later Writings, that either the Books must be supposititious, or the antient Chymists must have been acquainted with many things, which pass for the Discoveries of modern Authors. He gives plain Intimations of Phosphorus, which he calls the Vestal Fire, the *Offa Helmontii*, &c. and yet he must have liv'd two hundred Years before either *Helmont* or Lord *Bacon*.

He travel'd into *Mauritania*, where he is supposed to have first met with Chemistry, and to have imbib'd his Principles of the Art from the Writings of *Geber*; which Opinion is countenanced by the Conformity observable between them.

The *Spanish* Authors ascribe the Occasion of his Journey to a Passion he had for a Maid, nam'd *Eleonora*, who obstinately refus'd his Addresses. Upon inquiring into the Reason, she shew'd him a cancer'd Breast. *Lully*, like a generous Gallant, immediately resolves on a Voyage to *Mauritania*, where *Geber* had lived, to seek some Relief for his Mistress. But others say, that from thenceforward he devoted himself to Penance, and, among other pious Exercises, applied himself to the Conversion of Infidels, with a View to which he learned *Arabic* at thirty Years of Age. At his Solicitation, *James* King of *Arragon* founded a Seminary in *Majorca*, for the Education of Missionaries: After which he travel'd thro' *France*, *Germany*, and *England*; and was at last stoned to Death in *Africa* for preaching Christianity.

There are said to have been two *Raymund Lullies*; the one a Friar, and a Martyr, the other an Alchemist, and originally a *Jew*. 'Tis said there are above a hundred Chemical Manuscripts of *Raymund Lully* yet unpublished, preserved in the *Vienna* Library.

His principal Works are,

*De Secretis Naturæ, seu quinta Essentia.*

*De Accurtatione Lapidis Philosophorum.*

*Codicillum, seu Vade mecum de formatione Lapidum pretiosorum.* A Codicil, or Vade Mecum, of the making of precious Stones, now in Manuscript in the Library of *Leyden*.

*Clavicula de Lapide Philosophorum.*

*Testamentum.*

*Apertorium.*

*Epistolæ ad Edwardum Regem Angliæ.*

*Lux Mercuriorum.*

*De Mercurio.*

*Speculum magnum.*

*Testamentum novissimum.*

*Epistolæ ad Robertum Regem Angliæ.*

*Aphorismi.*

*Epistolæ accurtationum.*

*De Investigatione occulti Secreti.*

*Exempla accurtationis.*

All which Pieces are in Manuscript in the Library of *Leyden*.

A fair Copy of all *Lully's* Chemical Works, transcribed in 1483. and 1484. in two Volumes, Fol. is preserved in the *Bodleian* Library, given by *El. Ashmole*, Esq; Some of these are in the *Theatr. Chym.* and *Manget's Bibl. Chym.*

*JOHANNES DE RUPESCISSA*, a *Franciscan*, died in Prison, about the Year 1375. He wrote many Pieces on Alchemy. *Paracelsus* censures him, as having advanced things false and ridiculous.

'This Author is held as the Patriarch of the Chymists: His Writings are many, easy to be procur'd, and of great Weight. Besides his Theological Pieces, he wrote many Chymical ones; and had wrote more, as having a strong Chymical Taste, but that, like his great Predecessor *Bacon*, he was accus'd of Magic, and thrown into Prison; where he pined away, and died of Grief; by which means he was prevented from discovering many Secrets of Nature, which he was become Master of.

His principal Works are,

*Liber Magisterii de Confectione veri Lapidis Philosophorum.* Publish'd with other Pieces of Alchemy. Collected by *Gratarolus*. *Bas.* 1561. *Fol.* T. II. p. 126. In the *Theatr. Chym.* T. III. p. 189. and in *Mangeti Bibl. Chym.* T. III. p. 80.

*Liber Lucis.* Publish'd with the *Secreta Alchimie magnalia* of *Tho. Aquinas*, by *Dan. Branchius*. *Lugd. Bat.* 1598. 8vo. In the *Theatr. Chym.* T. III. p. 284. and *Mangeti Bibl. Chym.* T. II. p. 84.

*Rosarium Philosophorum.* Extant in *Mangeti Bibl. Chym.* T. II. p. 87. & 119.

*De consideratione quintæ essentiae rerum omnium.* *Basil.* 1597. 8vo.

*ISAAC HOLLANDUS*, and *JOHN ISAAC HOLLANDUS*, born at *Stolk*, a Village of *Holland*, wrote several Pieces on Alchemy, wherein they deliver many extraordinary Experiments.

Some say these were Father and Son; others, that they were Brothers. Whether, is not easy to determine; but certain it is they were both Persons of great Parts and Ingenuity, and wrote on the dry Topics of Chymistry with all the copious Eloquence of Orators. They seem to have lived in the thirteenth

Century; but this is not assured. The whole Art of enamelling is their Invention, as is also that of colouring Glass and precious Stones, by the Application of thin metal Plates thereon.

Their Writings are in the Form of Processes; and they describe all the Operations to the most minute Circumstances. The Treatise of Enamelling is esteemed the greatest and most finish'd Part of their Works; all that relates to the necessary Fusion, Separation, and Preparation of the Metals, is here delivered. They write excellently of Distillation, Fermentation, Putrefaction, and their Effects, and seem to have understood at least as much of these Matters as any of the Moderns. They publish'd a small Treatise of the Philosophers Stone, which, they hold, may be prepared from any Body in Nature. They describe Ways of producing it from Lead, Blood, Sulphur, and Mercury, and other Matters. They furnish several Experiments on human Blood, which *Van Helmont* and Mr. *Boyle* have since repeated. *Paracelsus* has likewise borrowed freely from them. There goes a very large Work, in *Folio*, under their Name, *Of the Construction of Chymical Furnaces and Instruments*.

Their principal Works are,

*De Lapide Philosophorum.* Extant in the *Theat. Chym.*

*Scientia Chimiæ.*

*De projectione infinita.*

*Opera Mineralia, sive de Lapide Philosophorum.* Extant in the *Theat. Chym.* Also published at *Middelb.* 1600. 8vo.

*Opera Mineralia & Vegetabilia.* *Arnheim.* 1616. 8vo.

*De Vino.*

*Opera Vegetabilia.* *Francos.* 1666. 8vo.

Besides these, they also wrote

*Manus Philosophica.*

*De Salibus & Oleis Metallorum.*

*BASIL VALENTINE* is commonly said to have been a *Benedictine* Monk of *Erfurt*; tho' we are informed there never was any *Benedictine* Monastery at *Erfurt*; and both his Names seem apparently coin'd, the one from the *Greek*, the other from the *Latin*.

His Writings are much commended, and much sought; tho' there are some spurious Pieces tack'd to them. He wrote in *High Dutch*, and but few of his Pieces have been translated into *Latin*. In his Experiments, he may be depended on for his Exactness and Veracity; his Style is clear, open, and pure, except when he treats of his Arcana, and particularly of the Philosopher Stone, when he is as obscure as the rest.

He should seem to have been the first who applied Chymistry to Medicine; for, after every Preparation, he never fails to give some medicinal Use thereof. He it was, likewise, who first broached the Doctrine of the three Chymical Principles, Salt, Sulphur, and Mercury, which *Paracelsus* afterwards appropriated; and it might be shewn, that *Paracelsus*, *Helmont*, the elder *Lemery*, and many others of modern Fame, owe a great deal of what is valuable in them to this Author; so that it is not without Reason that he is judged the Father of the modern Chymists, and the Founder of the Chymical Pharmacy.

*Van Helmont* writ upon the Alcahest, or universal Menstruum; and *Zwelfer*, pretending to know his Secret, describes it as a Preparation of Vinegar and Verdegrise, distil'd till the Verdegrise disappears. But *Otto Tachenius* shews, that *Zwelfer* borrow'd the whole Process from a Book of *Valentine's*, intitled, *Stangeist*, where, indeed, it is described in Terms plain enough: So the Sal Volatile Oleosum, which *Sylvius de le Boe* has long had the Credit of, and many other Secrets, which make a Figure in the modern Authors, are originally derived from *Basil Valentine*. See the PREFACE.

His Chemical Writings are;

*Opus ad utrumque:* Printed in the *Theatrum Chemicum*.

*De magno Lapide antiquorum sapientium.* Extant in *Mangeti Bibl. Chym.*

*Practica, una cum XII Clavibus, & Appendice.* Translated out of *High Dutch* into *Latin*, and publish'd with *Mich. Majer's Tripos aureus*. *Francos.* 1618. Also with the *Museum hermeticum reformatum & amplificatum*. *Francos.* 1677. and 1678. 4to. And in *Mangeti Bibl. Chym.*

*Apocalypsis Chymica:* *Erff.* 1624. 8vo.

*Currus triumphalis Antimonii*, translated into *Latin*, and illustrated with a Commentary, by *Theod. Kerckringius*. *Amst.* 1671. 12mo.

*Traclatus Chymico-philosophicus de rebus naturalibus Metallorum & Mineralium.* *Francos.* 1676. 8vo.

*Chymische Schrifften alle, &c.* that is, all his Chymical Writings, both printed and manuscript, enlarged and amended, and divided into two Parts: In *High Dutch*. *Hamb.* 1677. 8vo. with Figures; and again, *Hamb.* 1717. 8vo.

*Basil Valentine's* last Will and Testament, with his manual Operations, and a Tract of Things natural and supernatural. *Lond.* 1671. 8vo.

*PARACELSUS* comes next on the Stage, of whom I have given a very ample Account in the PREFACE. I shall, therefore, give here only an Account of his Works.



1. His *Chirurgia Magna*, which he dedicated to *Hieron Bonerus*, Dictator of the City *Colmar*, June 2. 1528.
  2. *Liber Apoplematicum*, which he dedicated to *Conrad. Wisserum*, Consul of *Colmar*, July 5. 1528.
  3. *De Gradibus, Compositionibus & Tartaro*.
  4. His *Great Surgery*, which he dedicated to the Emperor *Ferdinand* from *Munich*, May 7. 1536.
  5. The second Part, to the same Prince, Aug. 11. 1536.
- In these he makes mention of several other Pieces published by him, viz.
6. *De Archidoxis*.
  7. *De Sanationibus*.
  8. *De sanitate Microcosmi & Elementorum*.
  9. *De Generationibus Naturalium*.
  10. *De Suppuratione*.
  11. *De Signis*.
  12. *De Characteribus & adeptis*.
  13. *De Phlebotomia*.
  14. *De Origine novorum Morborum*.
  15. *De Magia*.

Besides these, Dr. Shaw mentions,

1. *De Gradibus & compositionibus receptorum & naturalium*, Lib. VII. dedicated to Dr. *Eph. Clauserus*, a Physician of *Zurich*. Basl. 1526. 4to.
2. *Archidoxorum*, Lib. X. dedicated to the Students of *Zurich*. Basl. 1527. 4to.
3. *Aur. Theophrasti. Paracelsi Archidoxorum, seu de Secretis Naturæ mysteriis, Libri X. quibus nunc accesserunt libri duo, unus de Mercuriis Metallorum, alter de Quinta essentia; manualia item duo, quorum primus Chemicorum verus Thesaurus; posterius præstantium Medicorum experientiis refertum est, ex ipsius Paracelsi autographo*, Basl. 1582.
4. *Paramirica Opera*, dedicated to D. *Joach. Vadianus*, a Physician, 1531. March 5.
5. *De Natura Rerum*, Lib. VIII. dedicated to his Friend *John Winckelstein* of *Fribourg*, 1537.
6. *Opera omnia*, in two Volumes, Folio, Latin.
7. There is also an *English* Translation of his *Archidoxa*, by *J. H. Oxon*. 1661. 8vo.

JOHN BAPTIST HELMONT appears next. He was born of a noble Family at *Brussels*, in the Year 1577. 36 Years after the Death of *Paracelsus*. He lost his Father in 1580. and, being the youngest Child, applied himself, against the Consent of his Mother, and without consulting his Friends, to the Study of Physic. He finished his Course of Philosophy in the Year 1564. being in the 17th Year of his Age, when he was noted for a great Reader, having read *Galen* twice, *Hippocrates* once, and all the other Physicians, both *Greeks* and *Arabs*, with great Care, and even common-plac'd them. When going to *Louvain*, he was appointed, by the Professors *Thomas Tyenus*, *Gerard Villers*, and *Hornius*, to read public Lectures on Surgery in the College of Physicians. In the 22d Year of his Age, being the Year 1599. he was created Doctor of Physic at *Louvain*, where he had begun to see thro' the Insufficiency of the School-physic, long before he had discovered any better Medicines of his own. Happening to be troubled with a slight Itch, which he could not get rid of by the School-method, but which was easily removed by the means of Sulphur, he repented having ever devoted himself to the Study of Physic, considering the Nobleness of his Birth, and that none of his Family had hitherto stooped to such a Profession. On these Motives he threw it up, divided his Fortune among his Relations, and quitted his Country, with an Intention never to return. His Books, to the Value of 300 Crowns, he threw aside; and, setting out for foreign Countries, rambled for ten whole Years, till, being instructed in Chymistry by a certain illiterate Person, he applied himself wholly to that Art; and having, in the Compass of two Years, obtained a few Chymical Medicines, he became capable of curing some Diseases.

In the Year 1609. he married a rich, noble, and virtuous Wife, with whom he retir'd to *Witvoord*, where he gave himself wholly up to the Pursuits of Chymistry. During his Noviciate in the Art, he tried many dangerous Experiments, which frequently hazarded his Life; and tho' he did not visit Patients, and practise Physic for Gain, he assures us he cured every Year some Thousands of sick People. He spent fifty whole Years in Distillations. He was in high Esteem with the Electoral Bishop of *Cologne*, a Prince eminently skill'd in Chymistry; and was invited by the Emperor *Rodolph*, and two other Emperors, to the Court of *Vienna*; but he always refus'd. In the Year 1624. he published a Treatise, printed at *Liege*, *De Aquis Spadanis*, or, *Of the Sparo-waters*, and afterwards several other Pieces.

He was not able to cure two of his Sons, whom he lost, of the Plague, nor his eldest Daughter of a Leprosy, though he practis'd on her full two Years; nor could he cure his Wife, nor his Maid, nor himself, of Poison. In January 1640. being the 63d Year of his Age, he was seized with a Fever, attended with a slight Shivering, which made his Teeth chatter, a prickling Pain about the Sternum, a Difficulty of Respiration, and a

Spitting first of bloody Matter, then of pure Blood. For the Removal thereof he took Shavings of the Penis of a Stag, upon which the Pain grew less; then he took a Dram of Goats Blood, and the Spitting of Blood stopt for four Days, leaving only a slight Cough, with a moderate Expectoration; but the Fever still remain'd, and was followed by a Pain in the Spleen, for which he took Wine boiled with Crabs-eyes; whereupon all the Symptoms disappeared. In the Year 1643. he was seized with a Syncope, occasioned by the Smoak of Charcoal, which he cured with Sulphur of Vitriol. On the 18th of Nov. 1644. he was seized with an Asthma, attended with two Fits of a Pleurisy; and, after languishing seven Weeks, died of a slight Fever, and extreme Weakness, on the 30th of December 1644.

Hence it is evident, that *Helmont* was not Master of the universal Remedy which he so often boasts of; but, in chronical Cases, he wrought extraordinary Cures, by means of violent Remedies, where the Constitution of the Patient was strong enough to endure the Action thereof. But, for all their vain Promises of long Life, neither of them arriv'd at old Age.

During the Retirement of this Author at *Witvoord*, he examined, with great Pains and Industry, all kinds of Bodies, both fossile, vegetable, and animal, in a Chymical Way; and thus first furnished a new Body or Course of Chymical Knowledge. Here he made those noble Experiments and Discoveries of Oil of Sulphur *per Campanam*, the *Laudanum Paracelsi*, Spirit of Hartshorn, Spirit of human Blood, *Sal Volatile Oleosum*, and others.

Having conceived a strong Prejudice against the *Galenical* Method and Medicines, from his own ill Success upon applying them in Practice, and finding Chymistry productive of so many, and much more powerful Remedies, he run counter, in every thing, to the *Galenic* School, and reduced the whole Art of Physic to Principles of Chymistry. With such Views he began to write: His first Piece was of Spaw-water, printed at *Liege* in 1624. as before-mention'd, which procured him considerable Esteem: There are several good Things in it, and but little of that Opinionativeness and Boasting, which shewed itself in his later Works. He had it reprinted the same Year at *Cologne*, with new Experiments. In 1644. he publish'd his second Piece, *De Humoribus*, a third *De Febris*, and a fourth *De Lithiasi*, which are all the Books he publish'd in his Life-time. Soon after the Publication of the last he died: So that the Suggestion of some eminent Chymists, that *Helmont* had changed his Sentiments, and had got quite other Things in View, appears without any Ground.

As he perceiv'd his Death approaching, he call'd for his Son, and gave him the following Charge: Take all my Writings, the crude as well as the finish'd ones; and join them together; to your Care I commit them; do with them what you think good. For so it has pleas'd Almighty God, who directs every thing to the best Purposes. This Son was a Person of deep Thought, but a little tainted with Enthusiasm; and in his Father's Life-time had strolled about with a Gang of Gypsies. After the Father's Decease, he acquitted himself of the Trust, publishing them just as he found them, without any Regard to Order, Consistency, or Correctness, and, besides, trusted the Impression principally to the Printer: So that we frequently find *Helmont* relating Things in one Place, which he contradicts in another. And, indeed, 'tis no Wonder we don't find the same Tenor throughout; for as Chymistry grew under his Hands, and as many new Views must turn up in forty or fifty Years, which he spent in gradually improving the Art, it is easy to conceive how there should arise a Difference.

The Pieces published by himself are all excellent; that of the Stone is incomparable, and the best; that of Fevers is a valuable Work; and that of the Humours is a fine Piece. The *Galenical* Doctrine of the four Elements, four Qualities, four Degrees, and four Humours, with the Method of Cure by tempering these Degrees, are here clearly and directly prov'd to be false and insignificant. The Treatise of the Plague, which is one of his posthumous Pieces, has many good Things, tho' it does not come up to the Merit of the former. But the rest are all so much inferior, that one would never suspect them to have come from the same Hand.

The best Edition is that of *Amsterdam*, in 4to. apud *Elzevir*. In the *Venetian* Edition in Folio, there are several Pieces not *Helmont's*; and the same may be said of that lately publish'd in *Germany*.

If his most solemn Protestations are of any Weight, he should seem to have been possessed of the Universal Medicine; a Thing which he inculcates in almost all his Writings. His Notion of the Origin of such an universal Remedy is very peculiar, and favours of that Enthusiasm, which was a Part of his Character. No Poison, says he, can act on a Carcase; there must be Life to produce an Effect: This Life he calls *Archæus*; and ascribes both Knowledge and Understanding thereto. If now any heterogeneous Body happen to be present to the *Archæus*, it rises into a Fervour, endeavours to expel the



the hostile Matter, and in order to that, exerts all the Force of the Body. To cure any Disease therefore, is to pacify and compose this *Archæus*. The Thing required, therefore, is such a Remedy as may readily calm, and put a Stop to, this unnatural Fervour upon all Occasions: And this, says he, is the universal Remedy.

This Doctrine of *Helmont* would not be so absurd, did he not ascribe Understanding to his *Archæus*. Setting this aside, the Principle which renders Poisons deadly, and Remedies beneficial, is the Circulation of the Blood. No doubt but *Helmont* was apprised of this before he died. For *Harvey* had published his Discovery some Years before; which *Helmont* could not but fall into, tho' he might chuse to dissemble the Matter, as it untwisted a large Part of his System, which he might want Leisure or Inclination to reform and model new.

From *Paracelsus* and *Helmont's* Time, the Number of Chymists and chymical Writers grew immensely; so that to rehearse them all would be endless. In *Borelli's Bibliotheca Chymica*, printed at *Heidelberg* in 1653. no less than four thousand chymical Writers, already extant, are enumerated; and yet he mentions none but those of his own Knowledge. Others, who took more Scope, found above double that Number at the same time. It may be added, that the Years elapsed since have produced more than all the Ages before.

Here, therefore, we must stop; the Field is too vast to enter on. We have conducted Chymistry from its Rise to its State; its Progress is now at an End: We shall only here observe, that as it is not only a dark and intricate, but a dangerous Art; so he who enters on it, must proceed not only with Address, but Caution. That Part, which relates to Metals, is remarkably dangerous: The single Vapour of Arsenic may either immediately suffocate, or occasion a Weakness for ever; and an Author who relates an Experiment, without expressing every Circumstance thereof at large, is not only useless, but even dangerous. The Event of every Operation depends on these minute Circumstances; and an Alteration in any one may not only prevent the Success of the Whole, but even render it unexpectedly fatal. We proceed, therefore, to single out of this vast Number those we would recommend for their Exactness and Fidelity in teaching the fundamental Parts of Chymistry; and these we shall reduce into four Classes. The first Class includes the systematical Writers, or those who have collected all the known Operations into a Body, and digested them in the Form or Order of an Art or Institution, for others to learn by; commonly with some Addition of their own Reasonings at the End of each Operation. The second Class contains the metallurgical Writers. The third comprehends the Authors on Alchemy: And the fourth, those who have apply'd Chymistry to the Uses of Natural Philosophy, Medicine, and other Arts.

FRANCISCUS DE LA BOE SYLVIUS, OTTO TACHENIUS, and their Followers, contributed still further to the Introduction of Chymistry into Medicine; so as to render the latter entirely dependent, both as to Practice and Speculation, on the former.

From the Whole of what has been hitherto delivered, it appears most advantageous to a Student in Chymistry, to begin with perusing the Authors who have reduced the Operations into the Form of Systems: The chief of which are the following.

#### SYSTEMATICAL WRITERS.

1. OSWALDUS CROLLIUS was a *Hessian*, and Physician in ordinary to *Christian Prince of Anhalt*. He was a Person of Learning, but a sanguine Follower of *Paracelsus*; even in his Extravagances about astral Virtues, Signatures, Chiromancy, Physiognomy, Gnomes, Sylphs, Parallels, and Resemblances of celestial and sublunary Bodies; on which he endeavours to found the Art of Physic. And yet the chymical Processes he describes are generally faithful and exact. He dedicates his Book to the Prince of *Anhalt*, from *Prague*, 1608. It shews the Ways of preparing several chymical Medicines, which are now commonly known.

His Works are;

The original Title is, *Basilica Chymica, Philosophicam, propria laborum experientia confirmatam descriptionem & usum Remediorum Chymicorum selectissimorum à Lumine Gratia & Naturæ desumptorum continens*: At the End is added, the same Author's *Traктatus novus de signaturis rerum internis*, *Francos.* 1609. 4to. Reprinted in 1611. 4to. 1620. 4to. and 1622. 8vo. *Basilica Chymica cum augmento J. Hartmanni*, *Lips.* 1634. 4to.

*Genev.* 1630. 1635. 1643. and 1658. 8vo.

2. BRUGNIUS comes next. He was Almoner to the King of *France*, and published

*Les Elements de Chymie*, à *Paris*, 1615. and 1624. 8vo. à *Rouen*, 1637. 8vo. à *Lyon*, 1665. 8vo.

These were translated into *Latin*, and illustrated with Notes, by *Jer. Barthius*, under the Title of *Tyrocinium Chymicum*, *Francos.* O. 1618. 8vo. Afterwards enlarged above one half

with Notes, and select Forms of Medicines by *Christoph. Gluckradt Regiamont.* 1618. 8vo. Afterwards republith'd with the Notes of both these Editors, as also the Forms of Medicine, digested into one System, by *Jo. Ges. Pelfhofer, Witteberg.* 1650. 8vo. Lastly, illustrated with a new Comment, by *Gher. Blasius*, *Amst.* 1659. 12mo. Of which another Edition enlarged and corrected was published, *Amst.* 1669. 12mo. This Work is also translated into *English*, by *Richard Ruffel*, under the Title of *Royal and practical Chymistry*.

3. JO. HARTMANNUS. His Works are; I. *Opera omnia Medico-chymica, collecta & in unum Volumen congesta, atque pluribus aucta à Conr. Jobrenio*, *Francos. M.* 1684. Folio. *Ibid.* 1690.

II. *Praxis Chymiatrica*, publish'd by *Jo. Michaelis*, and the Author's Son, *Everh. Hartmannus*, *Lips.* 1683. 4to. And with the Addition of three other Pieces, *Genev.* 1639. 8vo. and 1682. 8vo.

4. CHRISTOPHER GLASER was Apothecary in ordinary to the King of *France*, and the Duke of *Orleans*; and gave public Lectures on Chymistry, and Chymical Preparations, in the Royal Gardens at *Paris*. His Book is candidly and clearly wrote, and contains a little System of chymical Processes for making chymical Medicines in an easy and effectual Way. He keeps close to the describing of such Operations as himself had frequently repeated, without intermixing any foreign Theory. The Book is short, and fit for Beginners. The Original was printed at *Paris* in 8vo. 1688. It is also translated into *English* by *Walter Harris*, M. D. under the Title of, *The Complete Chymist, or a new Treatise of Chymistry; teaching, by a short and easy Method, all its most necessary Preparations.* *London*, 1677. 8vo. It was also published in *High Dutch*, under the Title of *Chemischer wegwäßer*, &c. *Jen.* 1710. 12mo.

5. NICOLAS LE FEBURE was Royal Professor of Chymistry, and Apothecary to the Household of King *Charles II.* He also flourished in the Court of *France*, as Chymist to *Louis XIV.* The best Edition of his Works is that in 12mo. He is highly to be commended, both for delivering the Art, with all the Processes, and precisely noting all the minute Circumstances. He is very faithful and accurate in relating his Experiments; and particularly careful in pointing out all the dangerous and fatal Processes: But he has this Defect; that in his Reasonings he has too much of the chymical Spirit, and talks too largely of the Virtues of his Medicines. Mr. *Boyle* quotes him under the Characters L. F. and mentions his *Eus primum of Balm*, whereby he pretended to restore Youth and Vigour to old worn-out Animals.

He published his *Traité de la Chymie* at *Paris* 1660. and 1669. 2 Vol. 8vo. and at *Leyden*, 2 Vol. 1669. 12mo. which was translated into *English*, by *P. D. C. Elq;* and printed at *London*, 1670. in 4to. under the Title of, *A complete Body of Chymistry, in two Parts: Containing whatever is necessary to be known in this Art, with the whole Practice of it.*

6. LEMERY THE ELDER was born at *Rouen* in 1645. He acquir'd his first Notions of Chymistry from an Apothecary of the Place, to whose Care he was committed: But, not content with this, he went to *Paris*, and there applied himself to *Monf. Glafer*. Afterwards he travel'd for Improvement; and at the End of six Years, return'd to *Paris* an accomplish'd Chymist. Here he exhibited his first Course of Chymistry in the Laboratory of his Friend M. *Martin*, Apothecary to the Prince of *Condé*; and afterwards open'd one of his own, which was soon resorted to both by Natives and Foreigners: So that *Paris* was then the Seat of Chymistry.

He was the first who began to dissipate the affected Obscurities of Chymistry; reducing it to more simple and determinate Ideas, throwing out a deal of the Jargon, and accommodating it to the Taste and Philosophy of the Time.

In 1675. he printed his Course of Chymistry, which was receiv'd with great Applause, and translated into several Languages. But he still reserved some of his Secrets; and is even said to have contented himself with making several of the Operations more easy than they had been, without revealing the utmost Degree of Facility he was acquainted with.

In 1681. the religious Troubles coming on, M. *Lemery*, who professed the Reformed Religion, was soon obliged to lay down his Courses: Upon which the Elector of *Brandenburg* invited him to *Berlin*; but he declined it, and came over to *England*, where he was favourably received by King *Charles II.* But Matters not answering his Expectation here, he returned to *France*, and took the Degree of Doctor in Physic at *Caen*; but the Edict at *Nantz* in 1685. prohibiting the Practice of Physic to those of his Religion, he was entirely stript of all Employment. Hereupon he embraced the *Roman Catholic* Faith, and thenceforward applied himself to Pharmacy; and in 1697. published two large Volumes, one of them intitled, *Pharmacopée universelle*, the other *Traité universel des Drogues simples*.

Upon the Revival of the Royal Academy in 1699. he was elected associate Chymist; and soon after, upon the Death of M. *Bour-*



# C H E

M. Bourdelin, Pensionary Chymist. Here he read his *Traité d'Antimoine* at several times: After which he began to droop under old Age, surrender'd his Place in favour of his Son, and died of an Apoplexy in 1715.

Account of his Works.

Nic. Lemery, *Cours de Chymie, contenant la manière de faire les Operations qui sont en Usage dans la Médecine, par une Méthode facile*, à Paris, 1675. 8vo. Lyon, 1724. 8vo. Leyd. 1716. 8vo. In Latin, Gen. 1681. 12mo. In High Dutch, Dresden, 1697. 8vo. In English, by Walter Harris, M. D. second Edit. Lond. 1688. 8vo. and fourth, translated from the eleventh Edition of the French. The best Edition of the Original is that of Paris, in 8vo. 1713. which has many Things not in any of the preceding ones. It contains the principal Operations belonging to the three Kingdoms; all which are described with Candour and Accuracy. To each are added Notes, containing the physical Reasons thereof: But his Reasonings are not to be trusted. He is every-where minute in enumerating all the Circumstances of the Processes, and particularly where any Danger might arise.

This Performance of his has gone thro' many Editions in various Languages; and yet it is ill concerted for such as study the Art: He begins with the very hardest Part, Metals. A great Number of his Processes are merely calculated for the preparing of Remedies; and his View, throughout the Whole, is rather to furnish the Shops with Medicines, than to instruct his Readers in the Knowledge and Grounds of Chymistry. But how hard is this, to make an Art a Drudge to Physic, which, in reality, is the principal Part of Natural Philosophy!

*Traité de l'Antimoine, contenant l'Analyse Chymique de ce Mineral, & un Recueil d'un grand Nombre d'Operations*, &c. à Paris, 1707. 12mo.

Besides his Pieces above-mentioned, there are several Papers of his in the Memoirs of the Royal Academy of Sciences.

7. LE MORT was Professor of Chymistry in the University of Leyden, whom Boerhaave immediately succeeded. He was a good practical Chymist, and explains the Operations of the Art distinctly, by means of the Art itself; of which he was a warm Patron, and zealous Defender. But many of his Processes are such as have long since been disused. He will by no means allow of mathematical and mechanical Explanations in Chymistry, nor the Doctrine of Attraction; and is extremely severe upon a very learned English Physician, who attempted to explain the Operations of Chymistry by their Assistance. His Works are the following.

I. *Jac. le Mort Chymie veræ nobilitas & utilitas in Physica Corpusculari, Theoria Medica, ejusque Materia & signis ad majorem perfectionem deducendis.*

II. *Pharmacologia Medico-physica, ratione & experientia nobilitata.*

III. *Chymia Medico-physica*, Lugd. Bat. 1696. 4to.

IV. *Metallurgia contracta*: To all which are added, *Collectanea Chymica Leydensia*, &c. Lugd. Bat. 1696. 4to. cum fig.

V. *Jac. le Mort de Concordantiâ Operum Naturæ & Chymie*. Lugd. Bat. 1702. 4to.

VI. *Le Mort Facies ac Pulchritudo Chymie ab affectis maculis purificata, & ad veras naturæ & suæ artis leges exornata*. Lugd. Bat. 1712. 8vo.

8. JOHANNES CONRADUS BARCHUSEN was Professor of Chymistry at Utrecht; and deserves well to be read, as he is an honest Writer, and sufficiently accurate, and delivers good Matter in an excellent Manner; tho' his Reasoning perhaps may be faulty. His *Elementa Chymie* are printed in 4to. and contain several particular Experiments, and manual Operations, no-where else to be met with.

His Works are,

I. *Jo. Conr. Barchusen Pyrotophia, succincte atque breviter Iatro-chemiam, rem Metallicam, & Chrysopæiam peruestigans*. Lugd. Bat. 1698. 4to. cum fig.

II. *Aeromata, in quibus complura ad Iatro-chemiam atque Physicam spectantia jucunda rerum varietate explicantur*. Traj. Bat. 1703. 8vo.

III. *Elementa Chymie, quibus subjuncta est confectura Lapidis Philosophici, imaginibus representata*. Lugd. Bat. 1718. 4to.

Other systematical Authors are,

Zach. Brendelii *Chymia in Artis formam redacta, ubi præter Alchymiam addiscendi Encheireses Chymicas facillimam, disquisita curata de famosissima præparatione auri potabilis instituitur*. Jen. 1630. 12mo. cum Præf. Fern. Rolfinchii. Jen. 1641. 8vo.

P. Thibaut, *Cours nouveau de la Chimie*, 12mo.

In English, under the Title of, *The Art of Chymistry, as now practised*. Lond. 1668. 8vo.

*A Complete Course of Chymistry, containing not only the best Chymical Medicines, but also great Variety of useful Observations*. By George Wilson. The fourth Edition. Lond. 1721. 8vo. This Book contains the chief Part of the chymical Preparations now in Use, with the Processes faithfully describ'd.

# C H E

Car. de Maets *Prodromus Chymie rationalis. Accedunt Animadversiones in Librum cui Titulus Collectanea Chymica Leydensia*. Lugd. Bat. 1684. 8vo.

Praxis Chymiatrica Rationalis. Lugd. Bat. 1687. 4to.

Chymia rationalis, Auctore T. P. Lugd. Bat. 1687. 4to.

Mich. Ettmulleri *Chymia rationalis ac experimentalis curiosa, secundum Principia recentiorum adornata, variisque ac propriis experimentis, tam Chymicis quam Præcticis, ut & Medicamentis nobilioribus referta, comite semper ratione, in ordinem redacta & edita per Joh. Chr. Ansfeld*. Lugd. Bat. 1684. 4to.

Staphorst *Officina Chymica Londinensis*, 1685. 8vo.

Chr. Lowe Morley, *Collectanea Chymica Leydensia, sive Medicamenta Maetsiana, Marggraviana, & Le Mortiana, &c.* Lugd. Bat. 1684. 4to. Revised by Theod. Muyskens. Lugd. Bat. 1693. 8vo. Ant. 1702. 8vo. In High Dutch, Jen. 1695. 8vo. This Book contains 600 Medicinal Processes.

Antoine Deidier, *Chimie raisonnée, ou l'on tâche de découvrir la Nature & la Manière d'agir des Remèdes les plus en Usage en Médecine, & en Chirurgie*. Lyon, 1715. 12mo.

Ern. Goth. Struve, *Paradoxum Chymicum sine Igne, (id est) Operationes & experimenta Physico-chymico-pharmaceutica, ipsaque medicamenta Chymica, ignis ope parari solita, sine igne exhibit.* Jen. 1717. 8vo.

M. Senac, doct. en Médecine, *nouveau cours de Chimie, suivant les principes de Newton & de Stahl*. Paris, 1723. 2 Vol. 12mo. & ibid. 1737.

Herman. Frid. Teichmeyer *Institutiones Chymie dogmaticæ & experimentalis, in quibus Chemicorum Principia, Instrumenta, Operationes, & Producta, simulque Analyses trium regnorum succincte Methodo traduntur*, &c. Jen. 1728.

Jo. Frid. Carthusi *Elementa Chymie Medicæ dogmatico-experimentalis, unâ cum Synopsi Materiæ Medicæ selectioris*. Hal. Magd. 1736. 8vo.

Joan. Junckeri *conspéctus Chymie theoretico-præcticæ*. Hal. Magd. 1730. 4to.

Job. Helfrici Jungken *Corpus Pharmaceutico-chymico-medicum universale, sive Concordantia Pharmaceuticorum compositorum discordans, modernis Medicinæ præcticis dicata. Ed. 3. prioribus longe auctior redditâ, per Davidem de Spina*. Franc. 1732. Folio.

Boerhaave in his Chymistry. Lugd. Bat. 1732. 2 Vol. 4to.

## METALLURGICAL WRITERS.

1. GEBER, who has been already mention'd.

2. GEORGE AGRICOLA. He was born at Glaucha, a Town of Misnia, in 1494. and dy'd at Chemnitz in 1555. His Work *De re Metallica*, reprinted several times in Folio, is a Proof of the Author's extraordinary Learning and Experience. By visiting all the Mines, and conversing freely with the Miners in Germany, he acquir'd a thorough Knowledge of the whole Process of Metals; and from him most of the following Writers have taken the greatest Part of what they know. He wrote with the exactest Fidelity, and in an elegant Roman Style; so that we consult him in Metallurgy upon all Occasions.

In the first Part of Metallurgy, or the Discovery of Metals, he is the only Author: He describes, with great Accuracy and Minuteness, all the Arts and Instruments made use of to discover Mines, and to know whether, in any given Glebe, there be Metal, and of what Kind: Nor is he defective in any of the other Parts. Several Authors have wrote Comments upon him, but he is clear enough without any.

His Writings are,

I. *De re Metallica*, Lib. XII. The best Edition is that of Frankfort, containing the Treatise *De re Fodinarum*, at the End. See below (No. IX.).

II. *Bermannus, sive Dialogus de re Metallica*. Basil. 1530. 8vo. ab accurata auctoris recognitione & emendatione nunc primum editus, cum Nomenclatura rerum Metallicarum. Lips. 1546. 8vo. and Bas. 1549. 8vo. ap. Froben.

III. *De Ortis & Causis Subterraneorum*, Lib. V.

IV. *De Natura eorum quæ effluunt ex Terra*, Lib. IV. Ven. 1553. Fol.

V. *De Natura Fossilium*, Lib. X.

VI. *De Veteribus & novis Metallis*, Lib. II.

VII. *Explication*, in High Dutch, of the Terms used in Metallurgy. Bas. 1546. Fol. and 1558. Fol. The same, with the Addition of a copious Index; the Whole revised, distributed into Chapters, with the Arguments of each Chapter, and illustrated with marginal Notes, by Jo. Sigisfridus. To which are added, Observations upon metallic Matters and Names; from the Papers of Geo. Fabricius; wherein chiefly those Particulars are treated of, which Agricola had omitted. Witteb. 1612. 8vo.

VIII. *De animantibus subterraneis liber*. Bas. 1549. 8vo. and 1556. Fol. ap. Froben. in certa Capita divisus nonnullis Marginalibus exornatus, à Jo. Sigisfrido. Witteberg. 1614. 8vo.

IX. *De re Metallica*, Lib. XII. quibus Officia, Instrumenta, &c. Twelve Books on the Subject of Metals, wherein the Houses,



Houses, Instruments, and Machines, with every thing belonging to metallic Affairs, are copiously describ'd, and represented to the Eye by Figures, inserted in their proper Places, with the Latin and German Names thereof. To which is added, the same Author's Book *De Animantibus subterraneis*, revised by himself. *Baf.* 1561. *Fol.* To which, in a posterior Edition, are added, *De Animantibus subterraneis*, *Lib. I.* *De Ortu & causis subterraneorum*, *Lib. V.* *De Natura eorumque effluunt ex Terra*, *Lib. IV.* *De veteribus ac novis metallis*, *Lib. II.* *Bermannus, sive de re Metallica*, *Lib. I.* *Baf.* 1657. *Fol.*

3. LAZARUS ERCKERN. He was Superintendent of the Mines in Germany, Hungary, Transylvania, Tyrol, &c. to three Emperors, whence he was furnish'd with a complete Stock of metallic Knowledge.

He was an experienc'd, candid, and honest Writer; relates nothing but what he had himself seen, without a Word of Theory or Reasoning; and every-where speaks as if he were sitting before the Furnace, and relating what passed.

He never fails enumerating every Circumstance, and always in the most open artless Manner, and a clear easy Style, adding Figures for farther Illustration. His Book was wrote in *High Dutch*, and printed at *Frankf.* 1694. in *Fol.* and is so much valued by the Curious, that Mr. Boyle laments his not understanding that Language, merely for the sake of reading this Author: But it has been since translated into *Latin*, with excellent Notes; so that this single Work might almost suffice for the whole Art of Assaying.

The same Work is translated into *English*, under the Title of *Fleta minor*; or, *The Laws of Art and Nature, in knowing, judging, assaying, fusing, refining, and enlarging the Bodies of confined Metals*. To which are added, *Essays on metallic Words*. Illustrated with Sculptures. By Sir J. Pettus. *Lond.* 1683. *Folio*.

4. JOANNES RUDOLPHUS GLAUBER was a celebrated Chymist of *Amsterdam*, accounted the *Paracelsus* of his Time. He had travel'd much, and, by that means, attained to a great many Secrets. He wrote above thirty Tracts, in some of which he acted the Physician, in others the Adept, and in others the Metallist. He principally excel'd in the last; and yet, even here, he comes short of *Agricola* and *Erckern*, in point of Fidelity, Simplicity, and Exactness; being ever forward to mix his own Speculations and Reasonings along with Matters of Fact.

He was a Person of easy genteel Address, and, beyond Dispute, well versed in Chymistry, being Author of the Salt still extant in the Shops under the Title of *Sal Glauberi*; as also of all the acid Spirits made by means of Oil of Vitriol, &c.

He is noted for extolling his *Arcana* and Preparations, and is even said to have traded a little unfairly with his Secrets: The best of them he would sell at excessive Rates to Chymists and others, and afterwards sell them over again, or make them public to increase his Fame, whence he was continually at Enmity with one or other.

It was this *Glauber* who shewed before the States of *Holland*, that there is Gold contain'd in Sand, and made an Experiment thereof to their Satisfaction; but so much Lead, Fire, and Labour, were employ'd in procuring it, that the Art would not bear its own Charges. However, he shew'd pretty clearly, that there is no Earth, Sand, Salt, Sulphur, or other Matter, but has its Share of Gold.

He was born about the Beginning of the sixteenth Century: He laboured greatly in the pharmaceutical and physico-mechanical Chymistry, and made a Multitude of Experiments, which, if rightly understood and apply'd, might conduce very much to the Knowledge of the Composition and Analysis of Metals, Sulphurs, and Salts.

He spent his whole Life in the Exercise of Chymistry, for the Practice of which he excel'd all those of his Age. But he rarely saw the Use of his own Experiments, applying Passages of the ancient Chymists to his own Productions, and thence vainly pretending to the Discovery of *Panacea's*, the Philosophers Stone, &c. He drew many into Snares, and expos'd the Art to Censure and Reproach.

In his Theory he is very confus'd; but whether, in the Practice, he be guilty of so many Falshoods as some have charged him with, may be much doubted, especially if we keep strictly to his Experiments, without regarding the golden Promises he makes.

His Writings are these;

I. *Furni novi Philosophici*, &c. in *High Dutch*, I. II. III. IV. and V. Parts. *Amst.* 1648. 1650. 8vo.

II. *Annotiones, uber den appendixen*, &c. Annotations on the Appendix to the fifth Part of the Philosophical Furnaces, containing several useful Secrets, &c. *High Dutch.* *Amst.* 1650. 1661.

III. *La description des nouveaux Fourneaux Philosophiques, traduit par la Sieur du Teil*, *A Paris*, 1659. 8vo. In *English*, by J. P. M. D. *Lond.* 1651. 4to.

IV. *Operis mineralis, oder vieler kunstlicken*, &c. A Description of several profitable metallic Operations, &c. *High*

*Dutch.* I. II. III. Parts. *Frankf.* 1651. 8vo. and 1655. 4to.

V. *Operis mineralis pars I. ubi docetur*, &c. Translated into *English* under the Title of *Glauber's Golden Art, to get Gold from Stones, Sand*, &c. 8vo.

VI. ————— II. *Amst.* 1652. 8vo.

VII. ————— III. *Amst.* 1652. 8vo.

VIII. *Grundliche warhafftige Beschreibung*, &c. A complete Account how to prepare Tartar in great Quantities from Wine Lees, &c. *Nurimb.* 1652. 8vo. In *Latin*, *Amst.* 1655. 8vo.

IX. *Miraculum mundi, oder amfuhelicke beschreibung*, &c. A complete Description of the Wonders of Nature, Art, and Science, in the antient universal Menstruum, or *Mercurius Philosophorum*, &c. *High Dutch.* *Hanau*, 1651. 8vo.

X. *Pharmacopææ Spagiricæ, oder grandlicher beschreibung*, &c. I, 2, 3, 4, 5, 6, and 7 Parts. *Nurimb.* 1654. 8vo. and *Amst.* 1656. 1667. 8vo. Also in *Latin*, *Amst.* 1656. 8vo. The I. II. and III. Parts, Appendix to the same. *High Dutch.* *Amst.* 1667. 1668. 8vo. The first Part translated into *Latin.* *Amst.* 1669. 8vo.

XI. *Deff. Teutschlands wolfabrt*, &c. The Prosperity of Germany, Part 1. concerning the Concentration of Wine, Corn, and Wood, &c. *Amst.* 1656. 8vo.

XII. ————— 2, 3, 4, 5, and 6 Parts.

XIII. *Trost de Scefabrenden*; or, Consolation of Seafaring Persons. *Low Dutch*, *Amst.* 1657. 8vo. In *Latin*, *ibid.* 1657. 8vo.

XIV. *Traetatus de Medicina Universalis, sive Auro potabili vero*. *High Dutch.* *Amst.* 1657. 8vo.

XV. *Opera Chymica, Bucker und Schrifften*, &c. First Part, *Frankf. M.* 1658. 4to. Second Part, *Frankf.* 1658. 4to.

XVI. *Traetatus de Natura salium*. *High Dutch*, 1658. 4to. In *Latin*, *Amst.* 1659. 8vo.

XVII. *Explicatio uber mein Miraculum mundi*. *Amst.* 1658. 8vo.

XVIII. *Oeuvres Minerales*, &c. *A Paris*, 1659. 8vo.

XIX. *Ander Theil*; or, Second Part of the *Miraculum Mundi*. *Amst.* 1660. 8vo.

XX. *Reichen-Schatz und Sammel-Kassens*, &c. A rich Treasure, &c. I. II. III. IV. and V. Centuries. *Amst.* 1660. and 1668. 8vo. The 1st and 2d Centuries in *Latin*, *Amst.* 1660. and 1661. 8vo.

XXI. *Libellus dialogorum*. *Amst.* 1663. 8vo.

XXII. *Explicatio, oder Aufselegung*, &c. An Explication of the Words of Solomon, in *Herbis, Verbis, & Lapidibus magna est virtus*. *High Dutch*, *Amst.* 1663. 8vo. In *Latin*, *Amst.* 1664. 8vo.

XXIII. *Libellus ignium, oder feuer-buchlein*, &c. A Treatise of Fires, &c. *High Dutch.* *Amst.* 1663. 8vo.

XXIV. *Novum lumen Chymicum*. *High Dutch.* *Amst.* 1664. 8vo. In *Latin*, *Amst.* 1664. 8vo.

XXV. *Von den dreyen anfangen der metallen*, &c. Of the three Principles of Metals, Sulphur, Mercury, and Salt. *Amst.* 1666. 8vo. In *Latin*, *Amst.* 1667. 8vo.

XXVI. *Kurtze erklarung uber die Hollische Gottin*, &c. Explication of the infernal Goddess *Proserpina*, Wife of *Pluto*; what the philosophical Poets, as *Ovid*, *Virgil*, and others, mean by her; and how, by *Proserpina's* Help, the Souls of dead Metals are delivered from the Chemical Hell, &c. *Amst.* 1667. 8vo.

XXVII. *De tribus lapidibus ignium secretorum, oder von den drey alleredelsten gesteynen*, &c. *High Dutch.* *Amst.* 1667. 4to. and 1668. 8vo.

XXVIII. *De Elia artista*. *High Dutch.* *Amst.* 1668. 8vo.

XXIX. *De Purgatorio Philosophorum*. *High Dutch.* *Amst.* 1668.

XXX. *Glauberus concentratus, oder laboratorum Glauberianum*, &c. *High Dutch.* *Amst.* 1668. 8vo. ———— *Oder kern der Glauberischen schrifften*, &c. The Kernel of *Glauber's* Writings, &c. In *High Dutch*, *Lips.* and *Hresl.* 1715. 4to. ———— Translated into *Latin*, under the Title of *Glauberus concentratus*.

XXXI. *De Igne secreto Philosophorum*. *High Dutch.* *Amst.* 1669. 8vo.

XXXII. *De Lapide Animalis*. *High Dutch.* *Amst.* 1669. 4to.

XXXIII. *Curieuse tract von gebrauch*, &c. A curious Tract on the Use of Wines, Corns, and Woods. *High Dutch.* *Amst.* 1686. 4to.

XXXIV. His Writings, translated into *English*, by *Christ. Pack.* *Lond.* 1689. *Fol.*

XXXV. *Traet. de Signatura salium, metallorum & planetarum*. *High Dutch.* *Prag.* 1703. 8vo.

XXXVI. His whole Works, translated into *Latin*, in several Volumes, 8vo.

5. JO. JOACH. BECHER, of *Spire*. He was born about 1625, and first made Professor of Physic, and then First Physician to the Elector of *Mentz*, and afterwards to the Elector of *Bavaria*, and Counsellor to the Emperor. He was a Man of great



great Wit as well as Learning, and skill'd in all the Parts of Science, as appears by his numerous Writings upon medicinal, philological, political, and mathematical Subjects; but his principal Application was to Chymistry, of which he made great Use in illustrating Natural Philosophy, and discovering the Principles and Composition of Bodies. He lived some time in England, and dy'd at London in 1682.

He appears to have been a warm, active, industrious Man, and a little too much tinged with alchemical Notions; but was almost the first Author who applied Chymistry to Philosophy at large, and shew'd its extensive Uses in explaining the Structure, Texture, Composition, and Relations of Bodies.

His Theory is by many prefer'd to that of all other Chymists, as sounder and deeper. He deduces all things from Water and Earth, as the only material Principles. The earthy Principle he shews to be of three Kinds; that is, he makes three Species of elementary Earths. This he chiefly effected in his *Physica subterranea*, where he has shewn great Acuteness in applying the principal and known Experiments to the framing a Theory in the way of experimental Reasoning.

His Chymical Works are principally these:

I. *Institutiones Chemicæ, seu Manuductio ad Philosophiam hermeticam*. Mogunt. 1662. 4to. — The same with Notes, and other Improvements, publish'd by J. Jac. Rosenstengel. Franc. 1705. 12mo. and 1716. 8vo.

II. *Orbitus Chemicus, obscuriorum terminorum, & principiorum Chemicorum Mysteria aperiens & resolvens*. Amst. 1664. 12mo.

III. *Atterum Laboratorii Chymici monacensis, seu Physicæ subterraneæ, Libri 2.* Franc. 1669. 8vo. Lips. 1681. 8vo. — The same, with Supplements from the Author's other Writings, collected by Jo. Ern. Stahl. Lips. 1703. 8vo.

IV. *Experimentum Chymicum novum, quo artificialis & instantanea Metallorum generatio & transmutatio ad Oculum demonstratur*. Franc. 1671. 8vo. Also at the End of the *Physica subterranea*.

V. *Demonstratio Philosophica, seu Theses Chemicæ, veritatem & possibilitatem transmutationis Metallorum in aurum evincentes, &c.* Francos. 1675. 8vo. Also printed at the End of the *Physica subterranea*.

VI. *Experimentum novum & curiosum de minera arenaria perpetua, &c.* 8vo. Lips. 1680. Also in the *Physica subterranea*.

VII. *Tripus Hermeticus fatidicus, pandens oracula Chymica, seu, (1.) Laboratorium portabile. (2.) Nitri & salis texturæ Anatomia. (3.) Alphabetum minerale, seu viginti quatuor Theses de subterraneorum & Mineralium Genesi, Textura, & Analysis, &c.* Francos. M. 1689. 8vo.

VIII. *Concordantia Chémica*. In High Dutch. Quarto. Not translated into Latin, that we know of. It contains many insignificant and useless Processes, but, at the same time, many curious and useful Experiments.

IX. *Metallurgia, oder natur-kundigung der metallen*; or, The Physiology of Metals. High Dutch. There have been a great many Editions of this Book.

6. Jo. KUNKEl, born about the Year 1630. was first bred up to Pharmacy, then to Glass-making: He was afterwards Chymist to the Elector of Saxony, then to the Elector of Brandenburg, and lastly to the King of Sweden. He applied himself to Chymistry upwards of fifty Years, whereby he arrived at a Pitch of Experience seldom met with. Having the Advantage of his Patrons Purse for trying all manner of Experiments, besides being Master of the Glass-works, he had Opportunities of making the most tedious Experiments without Charge: Withal he was very industrious, persevering, and acute in noting the Phenomena of Processes; but, for the theoretical Part, he was less happy, as not being versed in Philosophy and general Knowledge. His Doctrine of Principles is fluctuating and defective.

His Writings are these; viz.

I. *Observationes Chemicæ*. First publish'd in High Dutch, 1676. and translated into Latin, under this Title: *Johannis Kunckelii Elect. Sax. Cubicularii intimi & Chymici, utiles observationes, sive animadversiones de salibus fixis & volatilibus, auro & argento potabili, Spiritu Mundi & similibus; item de Colore & odore Metallorum, Mineralium, aliarumque rerum quæ in Terra producuntur, &c.* Primum ab Authore Germanice conscripta, nunc vero Latinitate donata à Carolo Aloisio Ramsaio. Londin. & Roterodam. 1678. 12mo. — The same under the Title of *Philosophia Chémica, experimentis confirmata*. Amst. 1694. 12mo.

II. *On Phosphorus*. High Dutch. Lips. 1678. 8vo.

III. *De acido & urinoso, sale calido & frigido, &c.* Berl. 1686. 8vo.

IV. *Art of Glass*; or, *Commentary on Aut. Neri*. In High Dutch. Francos. and Lips. 1689. 4to. A curious Work, which we expect to see soon in English, by a very able Hand.

V. *Collegium Physico-chymicum experimentale; sive laboratorium Chymicum, &c.* Hamb. and Lips. 1722. 8vo. High Dutch. A posthumous Work.

7. OLAUS BORRICHIUS. He was born in 1626. He was Physician to the King of Denmark, and public Professor in the

University of Copenhagen. He had travel'd much, was an excellent Scholar, and a great Operator in Chymistry. He is famous for the Dispute he held with the learned Conringius, concerning the Knowledge of the Egyptians, and the Antiquity of Chymistry, its Inventors and Authors.

His Writings are,

I. *De Ortu & Progressu Chemicæ dissertatio*. Hafn. 1668. 4to. And in *Mangeti Bibl. Chym.*

II. *Ol. Borrichii, Hermetis, Ægyptior. & Chemicor. sapientia, ab Herm. Conringii animadversionibus vindicata*. Hafn. 1669. 4to.

III. *Conspectus Scriptor. Chemicor. illustr. Libellus posthumus*. Haun. 1697. 4to. And in *Mang. Bibl. Chym.*

The famous Work of Conringius is the following:

IV. *Herman. Conringii de Hermetica Medicinâ libri duo, quorum primus agit de Medicinâ, pariterque omni Sapientiâ veterum Ægyptiorum: altero non tantum Paracelsi, sed etiam Chemicorum Paracelsi laudatorum, aliorumque, potissimum quidem Medicina omnis, simul vero & reliqua Doctrina examinatur*. Helmst. 1648. 4to. A second Edition, corrected, and enlarged with an Apologetic against Borrichius. 1669. 4to.

*Docimastica metallica*. Haf. 1660. 8vo. and 1677. 4to. and 1680. 4to.

Other Metallurgical Authors are,

AND. LIBAVIUS, of Hall in Saxony, who died in 1616. he wrote largely of the Nature and Examination of Minerals, so as to be even set on a Level with Agricola for the History of Metals he publish'd.

*Commentaria metallica.*

*Ars probandi Mineralia.*

J. WEBSTER's History of Metals. Lond. 1671. 8vo.

ALONSO BARBA *trattato de l'Arte Metallico compuesto en Espanol. en Cordua*, 1674. His long Residence at Potosi in Peru had enabled him to make many Observations relating to the Mines. The same in English, by the Earl of Sandwich. Lond. 1674. 8vo.

*Libro segundo de l'Arte metallico. En Cordua*. The same in English, by the Earl of Sandwich. Lond. 1674. 8vo.

It was reprinted at Lond. 1738. in 12mo. with the Addition of a third Part, containing a Discovery of all sorts of Mines, from Gold to Coal, by Mr. G. Plattes; and a fourth Part, intituled, *Houghton's complete Miner*.

II. MARCHESE, MARCO ANTONIO della tratta, della *prattica minerale*. In Bolog. 1676. 4to.

M. REAUMUR's Treatise of converting forged Iron into Steel, and to soften cast Iron, so as to make Utensils thereof equally perfect with those of forged Iron. Paris, An. 1722.

EM. SWEDENBORG, Member of the metallic College in Sweden, *Prodromus principiorum rerum naturalium sive novorum tentaminum Chymiam & Physicam experimentalem explicandi*. Amst. 1721. 8vo.

— *Principia rerum naturalium sive novorum tentaminum Phenomena Mundi Elementaris philosophicè explicandi, cum figuris æneis*, 3 Vol. Fol. Dresd. and Lips. 1734. This Book opens a new Scene in Natural Philosophy, and is large upon the Business of Metals.

There is a curious metallurgical Book just publish'd, in High Dutch, by Christopher Andreas Schluter, containing the whole Art both of Smelting and Assaying, as taken from the Works themselves, and exhibited to the Eye by numerous beautiful Copper-plates, Folio. The Title of it is *Gruntlicher Unterricht, &c.* or, (1.) A fundamental Description of mineral Works; shewing the genuine Way of explaining; with the several mechanical Structures and Furnaces thereto relating; with the Manner wherein they are practised at Hartz, and other mineral Works; particularly the various Methods of treating Gold, Silver, Copper, and Lead Ores, Sulphur, Vitriol, &c. (2.) The whole Art of assaying; containing the Ways of trying all sorts of metallic Ores, refining of Silver, separating it from Gold to Advantage, &c. (3.) A Set of Copper-plates for the two Parts, executed according to a Scale; with a proper Index to each Part. By Christopher Andreæ Schluter, Superintendent, at Under-Hartz, to his Majesty of Great Britain, &c. Brunswick, printed by Frederic William Meyer, 1738.

#### ALCHEMICAL WRITERS.

In the Alchemistic Branch the most approved Authors are,

1. GEBER, whom, nevertheless, Bernard, Count of Trevisa, ranks among the sophistical Authors.

2. MORIENUS.

3. ROGER BACON.

4. GEORGE RIPLBY.

5. RAYMUND LULLY.

For the Characters and Writings of these five Authors, see above.

6. BERNARD, COUNT OF TREVISA, flourished about the Year 1390. Borbaave says he wrote in the Year 1453. He was intimate with Thomas Bononiensis, first Physician to Charles the Eighth, King of France, to whom he wrote an alchemical Epistle, printed at Basil, 1600. 8vo. and 1583. 8vo. under



under the Title of *Bern. Com. Trevisa, de Chymico miraculo, &c.* This is extant in the *Theat. Chym. Ursell.* and in *Manger's Bibl. Chym.*

7. JOHN ISAAC HOLLANDUS, who, perhaps, was the same with,

8. ISAAC HOLLANDUS, who was posterior to *Arnoldus de Villa nova*, but earlier than *Paracelsus*. He was so highly esteemed by *Penotus*, that (being discovered in some Corner, in *Paracelsus's* Time) he took him for *Elias*, the promis'd Artist, who is to reveal the Secrets of Chymistry.

9. BASIL VALENTINE.

For the Character of these three last-mention'd Authors, see above.

10. ARTEPHIUS and *Morienus* are usually supposed prior to *Roger Bacon*; but the Age, or even Country where they liv'd, is not known. The former is firmly believed by the *Adepti* to have prolong'd his Life to a thousand Years.

11. THEATRUM CHYMICUM, in sex Vol. divisum. Argent. 1613. 1622. 1661. 8vo. A List of the Pieces contain'd in the several Volumes of this Collection, being one hundred twenty-three in Number, is given in *Endteri Catal. Libror. Med. Phys. Mathem. Norib.* 1695. 4to.

12. TURBO PHILOSOPHORUM, sive auriferæ artis antiquissimi Authores. 3 Vol. 1510. 1562. 1610. 8vo. In it are contain'd thirty-two Pieces.

13. PARACELUS. For an Account of him, see the PREFACE; and, for his Writings, see above.

14. IRENÆUS PHILAETHA. There are several alchemical Books publish'd under the Name of *Philaetha*. The first anonymous *Philaetha* is said to have been an *Englishman*, and his true Name *Thomas Vaughan*; tho', in some of his Works, he calls himself *Irenæus*, and in others *Eugenius Philaetha*. He is famous for having rendered *Van Suchten*, *Sendivogius*, and *D'Espagnet*, clearer in his Writings; which are principally these:

I. *Introitus apertus ad oclusum Regis Palatium.*

II. *Brevis manulectio ad Rubinum Cælestem.*

III. *Fons Chemicæ veritatis.*

IV. *Metallorum metamorphosis.*

V. *Vade mecum Philosophicum.*

VI. *Experimenta de præparatione Mercurii Sophici.*

VII. *Nucleus Alchemiæ.*

But, tho' this Author is said to write with great Clearness, yet his Followers differ widely from one another.

VIII. EUG. PHILAETHES, EUPHRATES, or the Waters of the East, treating of the secret Fountain, whose Water flows from Fire, and carries in it the Beams of the Sun and Moon. Lond. 1665. 8vo.

IX. *Anima magica abscondita.* Published together with his *Anthroposophia magica.* Lond. 1656.

X. *Secrets reveal'd; or, An open Entrance to the shut Palace of the King; containing the greatest Treasure in Chymistry.* By *Irenæus Philaethes, Cosmopolita*, who attained to the Philosophers Stone, aged twenty-three Years. Published by *W. C. Esq;* Lond. 1669.

XI. *Enarratio Methodica trium Geberi medicinarum, in quibus continetur Lapidis Philosophici vera Confectio.* Amst. 1678. 8vo.

XII. *A Collection of ten Treatises in Chymistry, concerning the Liquor Alcahest, the Mercury of the Philosophers, and other Curiosities.* Written by *Irenæus Philaetha, Helmont, &c.* Lond. 1684. 8vo.

15. MICHAEL SENDIVOGIUS. He was Companion to *Alexand. Sidonius*, or *Serenus*, a Scotch Gentleman, who, being near the Point of Death, intreated two Things of him: To take care of the Publication of his Manuscript; and to marry his Widow. *Sendivogius* perform'd both; but, in the Edition of his Works, suppress'd *Serenus's* Name, and clapp'd his own in its Place. The Title of his Pieces are,

I. *Novum Lumen Chemicum.*

II. *Dialogus de Mercurio & Alchemia.*

In these he maintains, with great Strength of Reason and Experiment, that Sulphur and Mercury, united, are the Constituents of every Metal; by Sulphur meaning, with *Geber*, the Sun's Rays: However, his Writings should be read with Caution, being full of vain Promises. His *Novum Lumen Chemicum* is done into English, and intitled, *A new Light of Alchemy, from Nature and manual Experience; with a Treatise of Sulphur.* To which are added, *Nine Books of the Nature of Things*, by *Phil. Theoph. Parac.* English'd by *J. F. M. D.* Lond. 1674. 8vo.

16. JOHN BAPTISTA VAN HELMONT; *Opera omnia.* Amstelod. 1652. 4to. See an Account of this Author above.

Other Alchemistical Authors are,

JO. FRID. HILVERTII vitulus aureus, quem mundus adorat, & orat. Treating of the rare Miracle of Nature, the Transmutation of Metals, and shewing how the whole Substance of Lead was, at the *Hagna*, in a Moment's time, converted into pure Gold, by a small Particle of the Philosophers Stone. Amst. 1667. 8vo. and Hag. Comp. 1702. 8vo. Extant also in

*Manger's Bibl. Chym.* It is also in English, under the Title of *Helvetius's Golden Calf*, Lond. 1670. 8vo.

*De Alchymia, Opuscula complura vet. Philosophi, cum fig. Francof.* 1550.

*Four Treatises of the Philosophers*, by ALPHONSO, King of Portugal, John Sawtre, and Florianus Randorf, a German, Lond. 1652. 4to.

JO. SEG. WEIDENFELD, four Books concerning the Secrets of the Adepti; or the Use of Lully's Spirit of Wine. A practical Work, collected out of the Fathers of adept Philosophy, reconciled together. Lond. 1685. 4to.

JAC. TOLLII, fortuita, in quibus præter critica nonnulla, tota fabularis Historia Græca, Phœnicia, Ægyptiaca, ad Chymiam pertinere asseritur. Amst. 1687. 8vo.

Manulectio ad Cælum Chemicum. Amstel. 1688. 8vo.

Sapientia insaniens, sive promissa Chémica, Amst. 1689. 8vo.

GABR. CLAUDERI Schediasma de Tinctura Universalis, vulgo Lapide Philosophorum, cum Petr. Jo. Fabri MS. res Alchymicorum obscuras explanante, necnon Ad. Gottl. Berlichii dissertations de Medicina Universalis, quin & Eman. Koenigii Epistola de elixirio Sophorum. Norib. 1736. 4to.

#### Chymical IMPROVERS of NATURAL PHILOSOPHY and PHYSIC.

Among the Writers who have treated of Chymistry, with a View to Natural Philosophy and Medicine, the Principal are these.

1. HELMONT.

2. The Honourable ROBERT BOYLE, Esq; thro' all his Writings.

3. JO. BOHNIUS, in his *Dissert. Chymico-physicæ*, Lips. 1696.

He was Professor at *Leipsic* in 1679. The Dissertations above-mention'd, besides an uncommon Reading, shew, that he had made a large Number of Experiments; and, as to his Reasonings, nobody goes beyond him. His Treatise de Acido & Alkali is excellent; and has let much Light into the Affair.

4. The celebrated Dr. COX and Dr. SLARE, in several Papers in the *Philosophical Transactions*.

5. M. HOMBERG.

M. Homberg was born at *Batavia* in the *East Indies*, in 1652. whence he came over with his Father to *Amsterdam*. He was sent to *Jenæ* and *Leipsic* to study Law; but, neglecting this for what was more agreeable to his Genius, he applied himself to *Orto Guericke*, famous for the Invention of the Air-pump, the Hemispheres, &c. to learn Experimental Philosophy.

From hence he went to *Padua*, where he spent a Year in the Study of Medicine, and particularly Anatomy and Botany. Afterwards he travel'd to *Bologna* and *Rome*; hence pass'd into *France*, and thence into *England*, where he work'd some time with the great *Boyle*. From *England* he went to *Holland*, where he perfected himself in Anatomy under the famous *De Graaf*; and, lastly, took the Degree of Doctor of Physic at *Wittenbourg*.

Afterwards he made a Tour thro' *Germany* and the *North*; and likewise thro' *Saxony*, *Bohemia*, *Hungary*, and *Sweden*, to view the Mines. At *Stockholm* he staid some time, and work'd in the King's Laboratory. His next Remove was into *Holland*, and thence into *France*, to pick up what had before escaped him.

From *Paris*, at the earnest Desire of his Father, he was upon the Point of returning to *Saxony*, to settle among his Friends; but M. Colbert sending a Messenger to him in the King's Name, with very advantageous Offers to settle there, he accepted them after a short Deliberation, and commenced Catholic in 1682.

In 1685. he went to *Rome*, and practis'd Physic there with good Success; but in a few Years he return'd to *Paris*, and in 1691. was chose a Member of the Royal Academy, and put in Possession of its Laboratory. In 1702. he instructed the Duke of Orleans in Chymistry; the most magnificent and best appointed Laboratory, which Chymistry had ever known, being provided for this Purpose. The same Year his Highness procur'd M. de Tschirnhausen's large Burning-glass from *Germany*, of which M. Homberg made a noble Use. He married a Daughter of the famous *Dodart* in 1706. and in 1715. died of a Dysentery.

He never publish'd any express Work, or Volume in form: His Essays, or Elements of Chymistry, were begun to be printed in the *Memoirs of the Academy*; and the rest of them were found fit for the Press at his Death. There are likewise several lesser Pieces on various Subjects, dispersed throughout the same *Memoirs*, none of which but open new Views, and shine with their peculiar Light. His Way of expressing himself was simple, precise, and methodical; and he was as far from the natural Ostentation of the Chymists, as from their Mysteriousness and Obscurity.

M. Homberg



**M. Homberg** was a most expert and masterly Chymist. He has distinguish'd himself by a great Number of general Experiments, as well as by his Reasonings; which are always perfectly fine and clear, and conducted with mathematical Severity. Natural Philosophy would have received considerable Improvement from him, had his Life been continued. He was a Person of great Genius, profound Skill, and indefatigable Industry. He was supported by the Duke of Orleans, late Regent of France, and perform'd Experiments at his Expence; which gave him an Opportunity of trying many Things out of the Reach of a private Person.

**STEPH. FRANC. GEOFFROY** was born at Paris in 1672. His Father was an Apothecary, and his Mother a Surgeon's Daughter. His Father spared no Pains nor Expence in his Education, tho' he design'd him only for the Shop, as well knowing, that a large Share of Knowledge was required to arrive at any tolerable Perfection in Pharmacy. To the Study of Philosophy in general, **M. Geoffroy** join'd private Courses of Botany, Chymistry, and Anatomy.

In 1692. his Father placed him with an eminent Apothecary at Montpelier; and, during his Stay there, he diligently attended the University Lectures, in all the Branches of Medicine; but the *Materia Medica* was his favourite Study. In 1693. he pass'd thro' the usual Examination for Pharmacy with Applause; and now first imparted to his Father his Design of being a Physician, and obtain'd his Consent. Accordingly the second Son, whom his Father had design'd for that Profession, was sent into the Shop instead of his Brother, and is now one of the Chymists to the French Academy.

In 1698. Count Tallard, being appointed Ambassador Extraordinary to England, took **M. Geoffroy** with him, as his Physician, tho' he had then taken no Degree in Physic. There he became acquainted with many of the learned Men of that Nation, and neglected no Means of making Improvements; and, in less than six Months, he was admitted a Member of the Royal Society. From England he pass'd into Holland; and in 1700. travel'd into Italy with the Abbé Louvois, in Quality of his Physician; every-where making farther Observations, and increasing his Stock of Knowledge. In 1699. he was made a Member of the Royal Academy of Sciences, and in that Capacity contributed, as far as his other Employments would allow, to its Ornament and Use.

In 1702. he took his Degree of Batchelor of Physic, and in 1704. that of Doctor, at Paris; after which he applied himself closely to his Studies, the better to fit him for Practice. In 1707. **M. Fagon**, Physician to the King, made him his Deputy, as Professor of Chymistry in the Royal Garden; in which he acquitted himself so well, that in 1712. **M. Fagon** resign'd the Charge up to him.

In 1709. the King made him Professor of Physic in the Royal College, and here he dictated his curious and useful Lectures on the *Materia Medica*. In 1718. he drew up a System, or Table of the mutual Relations betwixt different Substances in Chymistry; which, if rightly understood, and carried on, might become a fundamental Law for Chymical Operations, and guide the Operator with Success.

In 1726. he was elected Dean of the Faculty of Physic at Paris; and after the Expiration of two Years, the usual Time of holding that Office, was continued in it by the unanimous Consent of his Brethren. In the Beginning of the Year 1730. his Health began to decline, and he died on the 6th of January 1731.

He wrote a *Treatise of the fossil, vegetable, and animal Substances, that are made use of in Physic*, &c. translated from a manuscript Copy of the Author's Lectures, read at Paris, by **G. Douglas**, M. D. 1736.

Besides this, there are several other Pieces of his detach'd in the *Memoirs of the Royal Academy of Sciences*, and in the *Philosophical Transactions*.

**M. GEOFFROY THE YOUNGER**. In the *Memoirs of the Royal Academy of Sciences*.

**M. LEMERY THE YOUNGER**. In the *Memoirs of the Royal Academy of Sciences*.

**6. GEORGE ERNEST STAHL**, born in 1660. at Onold in Franconia, took to the Study of Chymistry at Fifteen; and, from reading **Barnerus's Collegium Chymicum**, readily discover'd a fix'd alkaline Body in Nitre: With the Help afterwards of **Kunkel's Books**, and **Becher's Physica subterranea**, the several Experiments of which he not only carefully weigh'd and compared, but repeated, he arrived at a great Proficiency in the Art, and has publish'd several excellent Pieces on Chymistry; which shew, among other Things, (1.) The Generation of artificial Sulphur. (2.) The Analysis of Vitriol, the Volatilization of the Acid of Vitriol, and its Restitution to its pristine Fixity. (3.) The Presence and Influence of a Phlogiston in several Bodies. (4.) The Resolution of Sulphur into a subtle Acid. (5.) The different Fixity of acid mineral Salts. (6.) The sudden Destruction of Nitre by Deslagration. (7.) The genuine Foundation of vinous and acetous Fermentation. (8.) The Conversion of Spirit of Wine, and its artificial Ingred-

into Vinegar. (9.) The Transposition of Juice of Citrons into Wine. (10.) The Passage of all fermentable Bodies into an insipid Earth. (11.) The Solution of Gold by Sulphur. And, (12.) of Iron by an Alkali.

His principal Chymical Writings are,

I. *Prodromus de indagatione Chymico-physiologica*, &c. 1683.

II. *Collegium Chemicum*, first deliver'd in 1684. in the way of Lecture, to the Students of Jena; several manuscript Copies of which getting abroad, and there being nothing like it then extant, many used it as a Comment on **Becher**. This, at length, induced the Author to consent to an Edition of it, which was publish'd under the Title of, *Fundamenta Chymicæ dogmaticæ & experimentalis*. Norimb. 1723. The same in English, under the Title of *Philosophical Principles of Chymistry*, by **P. Shaw**, 1738. 8vo.

III. *Zymotechnia fundamentalis*, 1697.

IV. *Observationes Chymico-physicæ*, 1697. and 1698.

V. *Differt. de Metallurgiæ & Docimastricæ fundamentis*, 1697.

VI. *Animadversiones ad artem tinctoriam fundamentalem & experimentalem*.

VII. *Opusculum Chymico-physico-medicum*. Halæ Magdeb. 1715. Consisting of several Pieces, which had been occasionally publish'd before, viz. (1.) *Prodromus de indagatione Chymico-physiologica*. (2.) *Zymotechnia fundamentalis*. (3.) *Observationes selectiores Physico-chemico-medice*. (4.) *Experimentum novum, verum Sulphur arte producendi*. (5.) *Spiritus Vitrioli volutilis in Copia parandi Fundamentum & Experimentum*. (6.) *Vitulus aureus*, &c.

VIII. *Specimen Becherianum*, annex'd to **Becher's Physica subterranea.**

IX. *Differt. de elogiis vitrioli*.

X. *A Treatise on Sulphur, both inflammable and fix'd*. In High Dutch. 1708.

XI. *A Treatise on Salts*. High Dutch. 1723.

XII. *Commentar. in Metallurgiam Becheri*, 1723.

XIII. *Præf. in Concordantiam Chemicam Becheri*, 1726.

XIV. *Experimenta, observationes, animadversiones*, 300 numero, Chymicæ & Physicæ, qualium alibi, vel nulla, vel rara, nusquam autem satis ampla, ad debitos nexus, & veros usus, deducta mentio, commemoratio, aut explicatio, invenitur, &c. Berolin. 1731. 8vo.

**7. FRIDERIC HOFFMAN** was born at Hall in Saxony, in 1660. To him we are principally indebted for a just Method of analysing mineral Waters. He first discover'd the Errors of the Antients on this Subject, and shew'd the true Ingredients of Waters by chymical Experiments. The chief Points are, that the predominant Salt in mineral Waters, as well as in hot Springs, is not acid, but alkaline; that neutral Salts, calcarious Earths, and irony Matters, with a most subtle volatile universal Acid, are contain'd in all mineral Waters. See his *Differtationes de Thermarum & Acidularum Usu ac Abusu*; with others on the same Subject, all which are abridged, and publish'd by **P. Shaw**, 1733. 8vo.

His other Chymical Writings are,

I. *Differtationes de Generatione Salium*.

II. ———— *Nitri Natura*.

III. ———— *Cinnabari Antimonii*.

IV. ———— *Admirabili Sulphuris Antimonii fixati Efficiacia*.

V. ———— *de Mercurio, & Medicamentis Mercurialibus*, &c.

VI. *Annotationes & Additamenta in Poterii Opera*. Franc. M. 1698. 4to.

VII. *Observationum Physico-chymicarum, select.* Lib. III. Hal. Magd. 1736. 4to.

Other Writers on Philosophical Chymistry are,

**JAC. BARNERI Chymia philosophica perfecte delineata, doctè enucleata, & feliciter demonstrata**, &c. Noriborg. 1689. 8vo.

**JO. FREIND, Prælectiones Chymicæ, in quibus omnes fere operationes ad vera principia, & ipsius naturæ leges rediguntur**. Amst. 1710. 8vo. and Lugd. Bat. 1734. 8vo. The same in English by **J. M.** with the Author's Defence of the Work against the Editors of the *Act. Erud. Lips. Lond.* 1712. 8vo.

**CLAUDE BOURDELIN**, Author of several Chymical Papers in the *Memoirs of the Royal Academy of Sciences*.

**JOHN BROWNE**. Several Papers of his detach'd in the *Philosophical Transactions*.

**DU CLOS, Observations sur les Eaux Minerales de plusieurs Provinces de France, fait in l'Academie R. des Sciences. A Paris**, 1675. 12mo.

——— *Differt. sur les principes des mixtes naturels*, Amst. 1680. 12mo.

**CAR. NEWMAN** wrote several Pieces, which are detach'd in the *Philosophical Transactions*.

**CAR. MUSITANI Pyrotechnia Sophia**, &c. Neap. 1683. Colon. Allobr. 1701. 4to.

——— *Opera omnia*. Genev. 1716. Folio.



JO. VIGANI *Medulla Chimiæ*, Lond. 1682. 8vo. *Gedan.* 1682. 8vo. *Jen.* 1687. 8vo.

AND. CASSII *de extremo illo & perfectissimo naturæ opificio ac principe terrenorum fidere, auro; de admiranda ejus naturâ, generatione, effectibus, atque ad Operationes artis habitudine.* Hamb. 1685. 8vo.

BOULDUCE, Author of several Chymical Papers in the *Mémoires of the Royal Academy of Sciences.*

J. JUNCKER *conspectus Chimiæ-theoretico-practicæ in forma Tabularum repræsentatus; in quibus Physica, præsertim subterranea & Corporum naturalium principia, habitus inter se, proprietates, vires, & usus, itemque præcipue Chimiæ Pharmaceuticæ & Mechanicæ fundamenta, à dogmatibus Becheri & Stahlî potissimum explicantur.* P. 1. *Hale Magd.* 1730. 4to. The second Part not yet publish'd.

## BIBLIOTHECARIUM CHIMICI.

WILB. GRATAROLI *veræ Alchemiæ scriptores.* Bas. 1561. Folio.

PETRI BORELLI *Bibliotheca Chymica, seu Catalogus Librorum Philosophicorum, Hermeticorum, in quo quatuor Millia circiter auctorum Chymicorum, vel de transmutatione Metallorum, re minerali & Arcanis, tam manuscriptorum quam in lucem editorum, cum eorum editionibus usque ad annum 1653. continentur.* Par. 1654. 12mo. *Heidelb.* 1656. 12mo. The Authors are here enumerated in alphabetical Order, but not with due Distinctions nor Fulness.

NATH. ALBINEI, *Bibliotheca Chemica contracta, in qua continentur, (1.) J. Aur. Augurelli Chrysopæia utraque. (2.) Cosmopolitæ novum lumen Chymicum. (3.) Anonymi Galli enchiridion.* Genev. 1653. and 1673. 8vo.

--- *Bibliotheca Chemica contracta, continens tractatus quatuor.* Genev. 1653. and 1654. 8vo.

--- *Aureum vellus, oder guldene Schatz, &c. The Golden Fleece; wherein are contain'd all the Writings of the most celebrated Authors in Alchemy, &c.* High Dutch. Hamb. 1708. 4to. Tom. 2. Bas. 1604.

WILL. COOPER, *Catalogue of Chymical Books, which have been written originally, or translated into English, in three Parts.* Lond. 1672. and 1675. 8vo. The third Part containing an Index of such Things, publish'd in the *Philosophical Transactions of the Royal Society*, as pertain to Chymistry, or the Study of Art in the Animal, Vegetable, or Mineral Kingdoms.

JO. JAC. MANGETI, *Bibliotheca Chymica, sive Collectio Scriptorum præstantissimorum Chemicorum, &c.* Francof. 1702. 2 Vol. Folio.

FRID. ROTH-SCHOLTZII *Bibliotheca Chemica, oder Catalogus von Chymischen-buchern, &c.* First, second, third, and fourth Parts printed separately. Norib. and Altorf. 1725. 1728. It is alphabetical: We have only seen so much of it as extends to the Middle of H; whether any more have been since printed, we doubt. *Shaw's Notes to Boerhaave's Chymistry.*

I have above given my Opinion, that it is not possible to transmute one Metal into another. I must, however, confess, that there are some very well attested Facts, which much favour the Doctrine of Transmutation. These are collected in the *Miscellanea Naturæ Curiosorum*, A. 1. Dec. 1. *Observ.* 17. as follows:

It is still a Dispute, whether any other Gold, besides that which Nature prepares in the Bowels of the Earth, can be produced by Art, entirely similar to natural Gold, or much more noble than it, as the Philosophers by Fire, and the Adepts, would have it. There are a great many who absolutely deny it, and that for various Reasons, and from the Instances of so many Impostures; as of some who dip, into Solutions of Gold and Silver, wooden Sticks, with which they stir these Metals, and impregnate them therewith: Others mix powder'd Coals with Solutions of Gold and Silver: Others make an Ink of Gold and Silver, with which they inscribe, on Paper, the Matter to be reduced. Others, instead of Sand, sprinkle with Calx of Gold and Silver the Letters written on Paper: Others employ Crucibles, with a double Space between, the lower of which is full of Gold and Silver, and this they break in the Process: Others employ Sticks, internally hollow, and full of Gold and Silver: Others fill the Coals with Gold, and cover the Crucibles with them: Others secretly, and by Slight of Hand, throw in Gold and Silver: Others, instead of common Mercury, take an Amalgama of Gold; besides many other Methods, which Impostors have contrived, and which are rehearsed by *Crugnerus*, *Kircher*, and *Michael Mejerus*, who, in his *Examen of Chymical Cheats*, describes above twenty-nine other Impostures.

Such as deny the Transmutation, alledge the great Disagreement among Chymists themselves about its proper Matter; while some search for it in Sulphur; others in Vitriol; others in Mercury; others in Arsenic; others in an uncommon Mercury, such as the returning Sun in the Month of March diffuses every-where, and which is to be gather'd ripe in the Month of October; and some even in cheaper Materials: Hence *Kircher* would chuse the mean Way,

and neither assert the Impossibility of Transmutation, nor even that it is perform'd in the manner Alchemists suppose, so as to be genuine, and much more noble and pure than the natural Gold; and he rejects that Operation of the Stone, which consists in Calcination, in the Separation, Conjunction, Putrefaction, Coagulation, Cibation, Sublimation, Fermentation, Circulation, and in fine, Projection of the four Elements: But against this Opinion of *Kircher*, *Solomon de Blawenstein*, as also *Valerianus Bonvicinus* have written with great Acrimony. But *Zwelffer* opposes *Kircher* with great Moderation. Many, on the contrary, assert the Transmutation as a Certainty; and they attempt to teach its Preparation. *Job. Dan. Mylius* gives us a Catalogue of them from the *Arabs*, *Greeks*, *Spaniards*, *French*, *Italians*, *English*, and *Germans*. And *P. Borellus* enumerates their Writings.

It is not my Design to set up for Umpire in this Dispute; nor do I adduce the Testimonies of past Ages, and the Instances of *Raymund Lully*, *Arnoldus de Villa nova*, *Paracelsus*, *Sendivogius*, *Anton. Bragadinus a Venetian*, *Trevissamus*, *Turnheiserus*, and others, who are said to have made chymical Gold; seeing, in our curious Age, some very certain Experiments were made, outweighing the Reasons adduced to the contrary; and the presenting these to the Reader may, it is hop'd, be acceptable, as they are taken from authentic Accounts.

*Dan. Sennertus* says, that the other Metals may be reduced into Gold, a Thing that has been often prov'd in our Days; and what *Alexander Seaton*, a Scotch Man, has done at *Cologne*, *Basil*, and other Places, is very well known; on which Head may be seen the History of the Transmutation of Metals by *Ewaldus de Hogelande*, and the Writings of *Andr. Libavius*, which he publish'd in Defence of the Art of Transmutation.

To derogate from the Testimonies of so many excellent Persons, says *Cornelius Martinus*, of *Antwerp*, who in their Writings solemnly affirm, that they had seen with their very Eyes, and not only felt with their Hands, but that they had accomplish'd the Transmutation of one Metal into another, would seem to be acting the Part of an imprudent Person, and not that of a Philosopher. When, in a public Disputation, this *Cornelius Martinus* refuted by many Arguments the Notion of the Stone, a certain Nobleman, standing up in the Company, order'd Coals and Lead to be brought him; and in the Presence of *Martinus* and others, throwing a certain Tincture into the fus'd Metal, by means of it he transmuted the melted Lead into Gold; and upon this *Martinus* recanted his former Opinion.

*Job. Baptista Van Helmont* confesses of himself; "I am obliged to believe the Stone that makes Gold and Silver, because at different times, with my own Hand, I made the Projection of one Grain, I think, upon some thousand Grains of hot Quicksilver; and, to the Admiration of many who were present, the Business succeeded in the Fire, as Books do promise. That Stranger who gave me the Gold (for he gave me about half a Grain, with which I transmuted nine Ounces and three Quarters of Quicksilver) had at least so much of it, as was sufficient to transmute 200,000 Pounds into Gold." He confirms the same Thing in his *Treatise de Vita æterna* towards the End; and more fully in his *Treatise*, intitled, *Demonstratur Thesis*.

In 1648. one Grain was sent to *Prague* to the Emperor *Ferdinand III.* with which three Pounds of Mercury were converted into Gold. The Story is more accurately told thus by others, 'The Nobleman, who in the Presence of his Imperial Majesty reduced, with one Grain of the Powder, Mercury into Gold, was call'd *Richthausen*, and whom the Emperor made a Baron, with the Title of *De Caos*. From this transmuted Gold his Imperial Majesty order'd to be struck a Medal with particular Inscriptions on each Side; on one Side, the Figure of a naked young Man, with a Sun instead of a Head, and his Right Hand lifted up holding *Apollo's* Lyre, and, in his Left Hand hanging down, *Mercury's* Caduceus, with this Device, *Divina metamorphosis exhibita Pragæ 15 Jan. 1648. in præf. S. Cæs. Maj. Ferdin. III.* On the Reverse, *Raris hæc ut hominibus nota est ars, ita rarâ in lucem prodit. Laudetur Deus in æternum, qui partem infinitæ suæ scientiæ abjectissimis suis creaturis communicat.* This Medal, afterwards found in the Emperor's *Escrtoire*, was by the Emperor *Leopold* given to *Zwelffer* to be struck and grav'd in Brass, as *Zwelffer* himself testifies in his *Manitissa pharm. Spagy.* where we have a Figure of it, as also in *Becher's Oedipus Chemicus*. In what manner, and from whom this *De Caos* had the Powder, *Monconny* gives an Account, (as the Electoral Bishop of *Meutz*, at the Diet of *Ratisbon* in 1664, had inform'd him) whose Words are to the following Purpose; "There liv'd one *La Bufardiere* in the House of a certain Nobleman (suppos'd to be the Count *de Schlick*) at *Prague*: "This Man, falling ill, and at the Point of Death, writ to his Acquaintance *De Caos*, and begg'd of him to come to *Prague*, as soon as possible; but the sick Man died some Hours before *De Caos* came, and, after his Arrival, inquir-



“ing whether he had left any thing, the Master of the Household shews him a certain Powder, entrusted to his Care, tho’ he did not know its Use. This Powder was carried off by stealth by *De Caos*, and with it he made several Projections; the first of which was made in the Presence of the late Emperor, who caus’d a Medal to be struck of this Gold, on one Side of which was the Character of *Mercury*, and, on the Reverse, the Day and Year it was struck.” Thus far *Monconmys*, who, in the Description of the Medal, which he had not seen, differs from *Zwelffer*, who was an Eye-witness, and consequently is of greater Credit in his Account of it.

Besides, *Monconmys* was told at *Ratisbon* by Count *de Par*, Chamberlain to the late Emperor, that an unknown Person had offer’d the Emperor a little of a Powder that remain’d at the Bottom of a small Box, which Powder, along with the Box, being put on a fus’d Mass of equal Parts of Mercury and Silver, exhibited, with burning the Box, so strong a Tincture, that, after that extraordinary red Mass was broken and cut thro’, it internally exhibited a great many red Veins like Blood; an Indication that the Powder was still two strong. After Refusing that Mass with the Addition of new Matter of the same Weight as at first, all that was converted into Gold was upwards of twenty-four Carats, in respect of Colour. This Person had receiv’d the Powder from another, and therefore he knew not the Secret of preparing it.

The same Count *de Par* told, that at another time a certain old Man came to the Emperor, and brought him a little of a certain Powder, and begg’d that it might be tried, because he believ’d it would possibly be of some Use. The Emperor orders, that he should return in three Days; and upon trying the Powder, eight Ounces of Mercury were converted into perfect Gold: Upon which the Emperor order’d to bring the Man, but by this time he was gone, and never after seen.

*Strobelberger*, an Apothecary at *Ratisbon*, told *Monconmys*, how a certain Merchant at *Lubeck* (who but little apply’d himself to merchandizing, but was Master of the Art of fixing and converting Lead into Gold) gave *Gustavus*, King of *Sweden*, a Mass of Gold of 100 Pound Weight, of which the King order’d to coin Ducats; and to distinguish them, on one Side was the King’s Effigies, and on the Reverse the Royal Arms, with the chymical Characters of Sulphur and Mercury on each Side: And from the above-mention’d Apothecary *Monconmys* had one of the Pieces. The Merchant, after his Death, tho’ for many Years before he had given over Trade, and tho’ he was never successful in it, left an Estate of 17,000,000 Crowns. I myself had a Present made me of one of these Ducats by *Ludovicus de Schonleben*, and mark’d with the Characters of Sulphur and Mercury.

*Georgius Fredericus de Greiffenclau*, Archbishop of *Mentz*, order’d to coin Ducats from Mercury converted into Gold, and they are mark’d with the Character of *Mercury*.

Besides the Projection, made by *De Caos* in the Presence of the Emperor, he perform’d another before the Great Vicar of *Mentz*; and the Archbishop himself; and this, as the Elector himself told *Monconmys*, he effected with all the Precautions which Philosophers usually employ in such an Operation: He took a small Pill like a Lentil, prepar’d from that Powder with Gum Tragacanth, that, uniting together, they might the better cohere: He rolled this Pill in Wax, which he put into the Bottom of a Crucible, and laid upon it four Ounces of Mercury, and put it into a Fire of Suppression. After a strong Blast-heat for half an Hour, upon removing the Coals, the Gold was seen fus’d, yet with very red Rays, which are otherwise commonly green. He, therefore, thought that the Gold was still too generous; and that, therefore, it was necessary to take it down by the Addition of Silver. The Elector himself threw in some Bits of Silver; and after a perfect Fusion, when it was poured into the Ingot, there was a beautiful Mass of Gold, but which was found somewhat acrid, the Cause of which *De Caos* ascrib’d to the Smell of Brass, which happen’d to be found in the Ingot; that, therefore, it was very proper to send it to the Mint to be run, after which it was very beautiful and sweet: And the Warden of the Mint affirm’d, that he never saw a more beautiful Piece; that it was above twenty-four Carats; and what is greatly to be admir’d is, how that Acidity could be taken off by one single Fusion; and the Elector promis’d *Monconmys* a Bit of this Gold. *Becher*, in his *Oedipus Chymicus*, also confirms this very Thing: “The same Person, says he, who gave the Tincture to the Emperor *Ferdinand*, repeated the same Thing ten Years ago at *Mentz*, in the Presence of the Elector and other great Personages, in a pretty large Quantity: And this the Warden of the Mint there, who coin’d Ducats of this Gold, can testify.”

The same Elector affirm’d, that, with one Grain of Powder, he had seen three Marks of Gold made from two Pounds of Mercury; and that, upon taking them out of the Crucible, as they were too high colour’d, by the Addition of three or four Drams of Silver they were all converted into Gold,

In what manner an unknown Person, meanly dress’d, and pretending to be born in the North of *Holland*, came *December 27. 1666.* to *Joh. Frederic Helvetius*’s House at the *Hague*, and gave him a Bit of Powder, as big as a Rape-seed, with which, roll’d up in Wax, and thrown into six Drams of melted Lead, the Lead was transmuted into Gold, the same *Helvetius* relates in a Treatise intitled *Vitulus Aureus*. This Gold, put into the Hands of *Borelius*, General Assayer of the Mint in *Holland*, and examin’d, was found so extraordinary, that it still transmuted some Part of the Silver thrown into the Gold in the Assay.

The Honourable Mr. *Murray*, in a Letter to *Monconmys*, dated *August 17. 1664.* likewise testifies, that Prince *Rupert* had it from the present Elector of *Mentz*, that the Projection of Gold was successfully perform’d in his Presence, and that the same Prince *Rupert* had in 1662. given to King *Charles* a large Piece of Gold, made at *Inspruck* by the same Person, who gave the Powder to the Elector; and this Story Mr. *Murray* mention’d in the Presence of *Monconmys*, as also the Assay he had made of the Gold by the King’s Orders.

CHEMOSIS, χήμωσις (corruptly χύμωσις) from χαίρω, to gape, is a Disease of the Eyes, proceeding from an Inflammation, when the White of the Eye swells above the Black, and overtops it to such a Degree, that there appears a sort of Hiatus or Gap between them, whence it takes its Name. The Author of the *Definitiones Medicæ* defines it to be an Elevation of the Membrane which surrounds the Eye, and is called the *White*, being an Affection of the Eye like white Flesh. *Galen, de Euphoristis*, calls it a red and carnosus Inflammation of the Cornea Tunica. *Paulus, Lib. 3. Cap. 22.* says it is called a *Chemosis*, when, through a vehement Inflammation, both the Eyelids are turned outwards in such a manner, as scarce to cover the Eye, and the White of the Eye appears higher than the Black, and red, and occupies a good Part of the Black.

CHENALOPEX, χηνάλωπιξ, from χήν, a Goose, and ἀλώπιξ, a Fox. See VULPANSER.

CHENOCOPRUS, χηνόκοπρος, from χήν, a Goose, and κόπρος, Dung, Goose-dung. It is very acrimonious, and of a resolvent Quality, and commended in the Jaundice. Some Authors relate how a Monk cured all Patients labouring under a Jaundice, only by giving them in the Morning, for eight Days together, a Dose of Goose-dung in Wine, for which Purpose he always fed two Geese, and made of their Dung a secret and precious Remedy to those Multitudes of icterical People, who flock’d to his House for a Cure. The best is reckoned to be the greenish, which is gather’d in the Meadows in the Spring-time, and, being dry’d with a moderate Heat, and pulveris’d, is given from half a Dram to a full Dram at a Dose. *Ettmuller* says, that the Dung is more effectual, if the Geese feed before-hand upon anti-icterical Herbs. It is commended also in the Scurvy, being taken frequently in Wine, either in the Form of a Powder, or of a Decoction. Goose-dung is, besides, a potent Diuretic, and therefore usually recommended in hydropical Cases. It is given internally also in intermitting Fevers, for the Cough, and in difficult Labours. But *Ludovicus de Pharmacia* says, there is generally but little Good to be expected from this sordid Medicine.

CHENOPODIO-MORUS. Mulberry-blight.

The Characters are;

The Fruit is succulent, like the Mulberry or Strawberry.

The Species are,

1. *Chenopodio-morus*; major. GREAT MULBERRY-BLIGHT, COMMONLY CALL’D STRAWBERRY SPINAGE. *Atriplex, Mori Fructu, major, seu fragifera major.* M. H. 2. 606. *Spinachia, fragifera.* Aldin. H. Farnes. 85. a.

2. *Chenopodio-morus*; minor. LESSER MULBERRY-BLIGHT, COMMONLY CALL’D BERRY-BEARING ORACHE. *Atriplex, Mori Fructu, minor, seu fragifera minor.* M. H. 2. 604. *Atriplex, sylvestris, Mori Fructu.* C. B. P. 119. *Atriplex, sylvestris, baccifera.* Clus. H. 135. a. I find no medicinal Virtues attributed to these Plants.

CHENOPODIUM, CHENOPUS, χηνοπόδιον, χηνοπός, from χήν, a Goose, and πός, a Foot. Goose-foot,

The Characters are;

The Calyx is quadrifid, or quinquefid, with deep Incisures, which produces eight or ten Stamina in the Bottom.

The Ovary is furnish’d with a long, forked, expanded Tube, which, when ripe, becomes an orbicular flat Seed, inclos’d within a kind of quadrifid or quinquefid Star. The Leaves are large, sinuous, or long.

*Boerhaave* takes notice of fourteen Species of the *Chenopodium*, besides two more, which have Leaves like *Kali*.

1. *Chenopodium*; folio triangulo. See BONUS HENRICUS,  
2. *Chenopodium*; Betæ folio. T. 506. *Blitum, minus polyspermum à feminis copid.* C. B. P. 118. M. H. 2. 599. *Blitum, erectius, seu 3 Tragi.* J. B. 2. 967. a.

3. Che-



3. Chenopodium; folio laciniato; comâ purpurascente. See ATRIPLEX.

4. Chenopodium; Pes Anserinus; 1. Tabern. Ic. 427. T. 506. *Atriplex, dicta Pes Anserinus*. J. B. 2. 975. *Atriplex, sylvestris, latifolia*. C. B. P. 119. M. H. 2. 604. *Pes Anserinus*. Dod. p. 616. a.

This is esteem'd a good Uterine and Antihysterical; and is said to provoke the Menstrues, and to expel the dead Fœtus, and the Secundines.

5. Chenopodium; Pes Anserinus; 2. Tabern. Ic. 428. T. 506. *Atriplex, sylvestris, latifolia, acutiori folio*. C. B. P. 119. M. H. 2. 604. *Atriplex, dicta Pes anserinus, altera sive ramosior*. J. B. 2. 976. a.

6. Chenopodium; folio sinuato candicante. T. 506. *Atriplex, sylvestris, folia sinuata, candicante*. C. B. P. 119. M. H. 2. 604. *Atriplex, sylvestris*. J. B. 2. 972. a.

7. Chenopodium; angustifolium; laciniatum; minus. T. 506. *Atriplex, angustifolia, laciniata, minor*. J. B. 2. 972. a.

8. Chenopodium; folio laciniato; coma virecente. T. 506. a.

9. Chenopodium; fœtidum. See ATRIPLEX OLIDA.

10. Chenopodium; Lini folio villosio. FLAX-LEAV'D ORACHE, COMMONLY CALL'D SUMMER CY-PRESS, OR BELVEDERE. T. 506. *Linaria, Scoparia*, C. B. P. 212. *Linaria, Belvedere dicta*. J. B. 3. 462. *Oxyris*. Dod. p. 101. *Herba Studioforum*. Tabern. a.

11. Chenopodium; Ambrosioides; folio sinuato. See BOTRYS.

12. Chenopodium; Ambrosioides; Mexicanum. See BOTRYS.

13. Chenopodium; Ambrosioides; Mexicanum; fruticosum. H. 14.

14. Chenopodium; Stramonii folio. Jussieu. *Atriplex, sylvestris, major, anguloso folio*. Barr. Ic. 540. *Atriplex, Chenopodia, folio Daturæ*. H. R. Monf. *Atriplex, odore & folio Daturæ, minori tamen*. Læf. Triumf. apud Frat.

*Chenopodium* with Leaves resembling the *Kali*.

There are two Species of this.

1. Chenopodium; sedi folio minimo; folio Kali; femine splendente; annuum. *Kali, minus, album, femine splendente*. C. B. P. 289. M. H. 2. 609. *Kali, album*. Dod. p. 81. *Kali, minus*. H. Eyf. Æst. o. 6. F. 1. Fig. 3. a.

2. Chenopodium; sedi folio minimo; frutescens; perenne. *Kali, fruticosum, minus, flore minore*. M. H. 2. 611. *Sedum, minus, fruticosum*. C. B. P. 284. *Sedum, minimum, arborefcens, vermiculatum, flore luteo*. J. B. 3. 695. *Sedum, minimum, arborefcens, Lobelii*. Lugd. 1132. H. R. D. *Boerhaave's Index alter Plantarum*, Vol. 2. p. 90.

CHEOPINA. See CHOPINA.

CHERAMIS, *χηραμῖς*, is expounded by *Erotian* on *Hippocrates*, the Hollow of a Shell-fish call'd *Myax*; and it takes that Name, he says, from *χηραμῖς*, which signifies a hollow Place. It frequently occurs in *Hippocrates*, and seems not much different from the *Chema*, which, in *Galen's Exegesis*, is expounded by it. *Cornarius* also, on a Place in *Hippocrates*, Lib. 1. *περὶ γυναικ.* explains *Cheramis* by the Measure of a *Chema*, and *Cælius* on another Passage in Lib. *περὶ γυναικ. φύσ.* expounds it by a Pugil. See CHEMA.

CHERAS. The Struma or Scrophula, a Tumor in which Kernels arise. *Johnson*.

CHEREFOLIUM. See CHÆREFOLIUM.

CHERIO is nothing but the Heat or Cold of Things, which leaves the Substance, and passes into Nature. Take an Example in Camphire: This has its Coldness of its *Cherio*, for which Reason it is a present Remedy in Inflammations; but in its primary and essential Qualities [*Substantia suarum primarum*] it is still hot, in the same manner as Sulphur and Spirit of Salt, together with Mercurialis, and precious Stones and Herbs. Besides, whatever Nature produces has its *Cherio*, that is, elementary, external, accidental Substances. It is oppos'd to *Relolleum*, which signifies the internal intrinsic Nature. *Paracelsus de Grad. et Compos. Lib. 2. Cap. 3, 4.* According to *Johnson*, the *Cherio* is the occult accidental Virtue of the external Elements, and the unmodify'd Nature of Heat and Cold.

CHERIONIUM is that in which Nature cannot be alter'd: Thus Crystal, harden'd by Nature, cannot be melted, as that which is made by Art. *Johnson*.

CHERMES & *Coccus Baphica*, Offic. *Chermes seu Coccus infectorius*, Park. Theat. 1395. *Kermes sive Chermes*, Ind. Med. 63. *Chermes, Grana tinctorum, Coccus Baphica, Coccus infectorius*, Mont. Exot. 9. *Chermes, Kermes, Coccus infectorius, Coccus Baphica, Granum tinctorum, Scarlatum*, Chom. 313. *Coccus seu Coccus ex Illice*, Bram. Hist. *Cocci radicum*, p. 2. KERMES-BERRIES.

This Grain is found adhering to the Branches, but rarely to the Leaves, of that Shrub, which *Dioscorides* calls the *κόκκος βαφικῆς*, and which is now commonly call'd *Ilex aculeata Cocci Glandifera*. The Grain itself is of a spherical Figure, as large as a Pea or Lentil, smooth, shining, and of a blackish-brown Colour,

The Names assign'd to this Substance amount to a pretty satisfactory Proof, that its first Inventors were not all of the same Opinion, with respect to its Origin, or whether it was an animal or vegetable Production; for *Kermes*, among the *Arabians*, signifies a small Worm; and *κόκκος*, among the *Greeks*, whence the *Latins* borrow'd their *Coccus*, imports no more than a Grain or Kernel; for which Reason, among the later *Greeks*, instead of the Word *κόκκος*, *σκώληξ*, which signifies a Worm, is always substituted; for these Grains are full of small Worms, the Juices of which are celebrated for dying Scarlet, a Colour so much admir'd in all Ages. Hence the Worm is taken for the Grain itself.

*Pausanias* is, by *Clusius*, in the first Book of his *Hist.* represented as using the following Words: "In the Fruit of the *Coccus* there is a small Animal form'd, which, when the Fruit is ripe, falls forth into the Air, becomes immediately capable of flying, and nearly resembles a Gnat. But they gather the Fruit of the *Coccus* before the Conception of the Animal, whose Blood it is which is useful in dying Wool." According to *Salmasius*, every Species of the *Coccus Tinctorum* is, by the *Greeks*, call'd *σκώληξ*, which signifies a small Worm, because it changes itself into that Kind of Insect; tho', at the same time, each Grain contains a large Number of these Animalcules, so that it seems surprising how the Custom prevail'd of calling the Worm itself the Grain, in which it is produced.

After the most diligent Scrutinies of the Naturalists into this Matter, 'tis now certain, that the Production of the *Coccus Tinctorum* is owing to a certain Insect, or small Worm; and that it is, in Reality, nothing but a certain Nidus or Follicle, fill'd with the numerous Progeny of that Animalcule.

Tho' Authors are now agreed upon this in general, yet they run into different Sentiments with respect to the Generation or Formation of this Animalcule in the *Coccus*. But as an Enumeration of their Opinions, with regard to this, is foreign to our Design, we shall make no farther Attempt that way.

Among the Antients, according to *Dioscorides*, in L. 4. C. 43. the best *Kermes* was thought to be produced in *Galatia* and *Armenia*; the next, in Goodness, in *Asia* and *Cilicia*; and the next to that, in *Spain*.

At present the *Kermes* is produced and gather'd in *Europe*, in the Countries adjacent to the *Mediterranean Sea*; but that found in *Languedoc*, in *Provence*, is accounted the best. That this Shrub was not, at all Ages, proper for producing *Kermes* fit for Use, was known in the Days of *Pliny*. But when that Author, in the forty-first Chapter of his ninth Book, affirms, that, when it is one Year old, the Juice is languid, and, when four, good for nothing, it is obvious, this Assertion extends only to the Plant itself, and not to the Grains, which are collected yearly, as *Salmasius* would have it. The Monks, indeed, according to the *Censura in Antidotarium Mesuae*, distinguish the *Coccus Tinctorum* from the *Kermes Grains*; which latter, they maintain, are found about the Roots of certain Herbs, but in greater Plenty about such Roots of the *Pimpinella* as are old and thick, lying, as it were, on the Surface of the Ground. But since this erroneous Opinion, peculiar to these Monks, is sufficiently confuted by *Matthioli* ad *Dioscor.* and by *Cæsius*, we shall make no more mention of it, but consider to what medicinal Uses *Kermes* are applied. But, before we enter directly upon the Execution of this Design, we shall pave the Way, by giving some Observations and Experiments, which have a Tendency to illustrate the Nature, and discover the Properties, of the *Kermes-grain*.

First, then, Count *Marsigli*, in his *Histoire Physique de la Mer*, informs us, that the internal Matter of the *Coccus* is possess'd of a bitter and astringent Taste, like that of the Bark of the Shrub which produces it: Hence 'tis obvious, that the Juice of the Vegetable, by which the Animal is nourish'd, still retains its original Nature and Qualities.

Secondly, in *Garidel's Histoire des Plantes qui naissent aux environs d'Aix*, and in the *Ephemer. Nat. Curios. Vol. 3.* we are told, that Pigeons are very fond of the *Kermes-grains*, and give them to their Young, to which they frequently prove mortal; whilst the older Pigeons with Difficulty escape the same Fate, by the Advantage of a Diarrhea, the Matter of which tinges the Walls of the Dove-coot with a redish Colour.

Thirdly, Count *Marsigli*, in the before-cited Work, affirms, that the Substance of the *Kermes-grains*, mix'd with Vitriol in the Proportion, which, in Galls, is necessary for making Ink, produces a Substance of a black Colour, proper for answering the Purposes of Ink. But it cannot be hence infer'd, that the *Coccus Tinctorum* is a Species of Gall; but only, that the vegetable Matter, fit for making Ink, did not lose its original Quality in the Body of the Animal which it nourish'd.

Fourthly, the last quoted Author informs us, that, with Oil of Tartar per Deliquium, it changes its lateritious Colour into that of a beautiful Crimson, little inferior to Scarlet. With Water of Quick-lime the same Colour may be obtain'd, as

with



with the Oil of Tartar. With Spirit of Sal Ammoniac it is changed into a beautiful red Colour; not entirely so red as those produced by the other two alkaline Liquors.

*Fifthly*, the same Author affirms, that, when mix'd with Spirit of Vitriol and Sulphur, it does not, in the least, change its lateritious Colour, nor produce any Fermentation. With Spirit of Nitre it changes its lateritious Colour into one somewhat yellowish, without any kind of Fermentation. In Spirit of Vinegar its natural Colour becomes a little darker, and soon after a Precipitation happens.

*Sixthly*, the above quoted Author tells us, that in a Decoction of Mallow-flowers, as also in an Infusion of Tournsole, the Kermes-grains produce no Change; nor does their Solution, when sprinkled upon blue Paper, in the least alter its Colour.

*Seventhly*, *Antonius Heyde*, in his *Observationes Medicæ*, *Obs.* 75. informs us, that Rain-water is deeply tinged by these Grains, as is commonly known. Dissolved Pot-ash, mixed with this Tincture, renders it more deep and pellucid, no Particles at the same time subsiding. Aqua-fortis renders the Colour fainter, and the Liquor itself turbid; whilst, at the same time, redish flakes gradually subside. A few Drops of this Tincture, pour'd into a Solution of sublimate Mercury, produce a Secretion of redish flakes, which are precipitated to the Bottom. The bluish Colour of the Tincture of Guaiacum is not changed by an Admixture of the Tincture of these Grains: Hence 'tis obvious, that this Tincture is destitute of acid Particles, which seems also to be confirm'd by the preceding Experiments.

*Eighthly*, the above-mentioned *Count Marssigli* informs us, that two Pounds of the pure Substance of the Kermes-grains, without the Husks, were dissolved in Rain-water, and set by a gentle Fire, in order to acquire a due Thickness, with a View to try whether a solid volatile Salt could be obtain'd from the Kermes-grains: But this Experiment was not crown'd with Success, tho' the greatest Diligence and Care were used in carrying on the Process. Two Pounds more of entire and recent Kermes-grains were, therefore, put into a luted Retort, with a Receiver adapted to it. Four Hours, or a little more, after the Distillation was over, the Degrees of Fire being in the mean time punctually observed, they at first yielded a Kind of aqueous Liquid, which, when inspissated, assumed a Colour resembling that of Blood; and when the oleous Particles began to ascend, the whole Glass was fill'd with small Clouds, produced by a certain Spirit of the volatile Salt; which, when the Spirit became cold, was observed adhering to the Sides of the Receiver. The *Caput Mortuum*, remaining in the Retort, weigh'd three Ounces. The whole remaining Part of the Matter, except a small Quantity destroy'd by the Fire in the Course of the Process, consisted of a Substance which was fluid, aqueous, oleous, and impregnated with a colligated volatile Salt. When this Liquor had absorb'd all the volatile Salt which adher'd to the Sides of the Vessel, it diffused a pretty strong urinous Smell, like that observed in Spirit of Hartshorn, tho' not entirely so strong. The whole Liquor, filtrated thro' a Paper, left behind it three Ounces of a brownish-colour'd Oil. The Liquor, when clear, purged from its oleous Parts, and put into a Cucurbit, yielded, by Distillation, ten Ounces of a Spirit richly impregnated with volatile Salt, of a penetrating urinous Smell, and so strong, that it seem'd, as it were, to consist of nothing but volatile Salt. Upon continuing the Sublimation, another, but weaker, Spirit was yielded. The Spirit, impregnated with the volatile Salt, when mix'd with a Decoction of Mallow-flowers, gave it a greenish-yellow Tincture, like that produced by a Mixture of the Decoction of Mallow-flowers with Sea-water. Such a Change is also produced in it by any Substance of a perfectly alkaline Nature. The *Caput Mortuum*, when first calcin'd, and afterwards elixivated, the Moisture being evaporated to a Dryness, yielded only half a Dram of fix'd Salt: This small Quantity of fix'd Salt yielded, seems to evince, that the vegetable Nature of the Juice, by which the Animalcule is nourish'd, is not changed into an animal Nature.

From these Experiments *Marssigli* concludes, that the Substance of Kermes-grains is richly impregnated with a volatile Salt of an alkaline Nature. Mr. *Groffroy* also, upon distilling Kermes-grains by the Retort, obtain'd urinous and volatile Liquors; which, when pour'd into the Tincture of Turnsole, produced no Change, but tinged the Tinctures of Roses and Violets with a greenish Colour. From one Pound of Kermes he obtain'd half an Ounce of pure concreted volatile Salt, and about a Dram or two contaminated with a yellowish Oil. A large Quantity of fetid Oil was yielded, which was not black, but of a deep-yellow Colour, and thick, like Butter. Hence he concludes, that the Principles of the Kermes can be more properly compared to nothing than to the Products yielded by crude Silk, when chymically examined.

As for the medicinal Virtues of the *Coccum Tinctorium*, *Dioscorides*, in the forty-third Chapter of his fourth Book, de-

scribes them in the following manner: This Substance is of an inspissating Quality; and, when triturated with Vinegar, is highly proper for anointing Wounds, and cut Nerves. *Matthiolus*, from *Galen*, informs us, that the *Granum Tinctorium* is possess'd of an astringent, and, at the same time, of a bitter Quality, both of which dry without creating Pain; for which Reason it is proper in large Wounds, especially those of the Nerves; for which Purpose some triturate it with Vinegar, and others with Oxymel. *Pliny*, in the fourth Chapter of his twenty-fourth Book, informs us, that it is to be laid upon recent Wounds, triturated with Vinegar; upon the Eyes, when affected with Defluxions, triturated with Water; and to be dropt into inflamed Eyes. From these Passages it is obvious, that the Antients thought Kermes proper, in Cases where the Use of astringent, and consequently of inspissating and repelling Medicines was indicated. The Moderns, with the *Arabians*, ascribe a highly corroborating and cordial Quality to the Kermes. The Cloth dyed with these Grains, commonly call'd Crimson or Scarlet Cloth, is also highly extol'd on account of these Qualities, and is, for that Reason, used not only for bringing forth the Measles, by wrapping the Patient in it, but also for corroborating the Heart, by the Application of Epithems, wrapt up in it, to the Region of that Organ. The Application of a Piece of this Cloth is also thought good for curing Venereal Buboes. *Schroder*, in his *Pharmacopæia*, informs us, that it is a common Practice to tie a silken Thread, of this Colour, about the Parts affected with an Erysipelas, in order to remove that Distemper. *Simon Pauli*, in his *Quadripartitum Botanicum*, affirms, that the Eruption of the Measles is greatly promoted in Children by wrapping them up in this Cloth; and that he has seen it successfully applied, by Men of Skill, to Venereal Buboes. For preventing Abortion, and strengthening the Fœtus, some Women use, as an infallible Remedy, wearing a Belt of this sort of Cloth, next their Skins, all the Time of their Gestation. Others use the like Belt for suppressing an immoderate Flux of the Menfes and Hæmorrhoids. *Ludovici*, in his *Pharmacopæia*, insinuates, that these external Applications are none of the best and most effectual. "To add, says he, the Knap of a scarlet Cloth to medicated Bags and Epithems, is a Practice more ostentatious than useful: To tie up bleeding Parts with a scarlet Thread, or to solicit the Eruption of the Measles, by wrapping the Patient in scarlet Cloth, seems a Practice only worthy of ignorant Women." And *Hoffman*, in his *Clav. Schroder*, informs us, that, when scarlet Cloth is used for promoting the Eruption of the Measles, the Effect must rather be produced by the Force of the Patient's Imagination, than any expulsive Virtue lodged in the Cloth itself. Nor, according to *Lanzoni*, in *Eph. N. C. D.* 3. a. 1. o. 26. does a scarlet silken Thread, tied about the Part, remove the Erysipelas. If we consider, that the Principles which compose the animal Body have a Tendency to an alcalic Disposition; if also we consider, that the Animalcules of the *Coccum Tinctorium* as yet retain some Properties of the Substance by which they were nourish'd, especially the astringent Qualities peculiar to the Juice of the Shrub; we cannot deny, that the Kermes-grains contain very considerable Virtues, which is indicated by their bitter and astringent Taste; in consequence of which Quality it is corroborating, and calculated for removing the Laxity of the Fibres, and correcting the Pecceancy of the accecent Humours. It is also obvious, that the saline alkaline Substances it yields in a chymical Distillation, are proper in Disorders, where an Acid is to be corrected and subdued. Hence 'tis evident, whether we use the alkaline Salts produced by the Fire, or the unchanged Substance of the Grains, that the Preparations are only to be commended as excellent Corroboratives, and Cordials, in particular Cases; but not in every Case indiscriminately, and without having a regard to the predominant Fault in the Constitution. Hence the Reason is plain, why the Powder of Kermes-grains, in a poach'd Egg, with the Addition of a little Frankincense, or Mastich, is successfully used by the *Italian* and *Portuguese* Women, for preventing a Miscarriage; and why, according to *Clytus*, the Powder of Kermes is properly exhibited to the Women of *Montpelier* in difficult Labours, and Loss of Strength; for, by corroborating Medicines, Abortion is prevented, where Fibres, in a too lax State, are to be braced, that they may not lose what ought to be retain'd. The Expulsion of the Fœtus, on the other hand, is promoted by increasing the contractile expulsive Force of the Parts, which depends on the Corroboration of their constituent Fibres. As for the medicinal Virtues of Scarlet, or any other red Cloth, the deeper the Cloth is tinged with a strong and lively Red, the more powerfully it reflects the Heat sent from the Part to which it is applied. Hence its medicinal Effects are owing to its heating Quality, since it neither absorbs nor dissipates, but powerfully reflects the Heat it receives. The same is applicable to scarlet Silk Threads, See ALKERMES.

CHERMES *Mineralis*. See ANTIMONIUM.

CHERNIBION,



CHERNIBION, χερνίβιον, in *Hippoc. Lib. 7. Epid.* signifies an Urinal.

CHERSA, call'd also *Fecula*, in some Authors signifies a Root reduced to a farinaceous Powder; which Way of Preparation some condemn as exhausting the Virtues of the Drug, and rendering it good for nothing; but this is to be estimated in proportion as it consists of more or less volatile or fixed Parts.

CHERSÆA, χερσαῖα. Earthy. An Epithet of one of the three Species of Asps. See ASPIS.

CHERSYDRUS, χερσυδρῦς, from χέρσος, Earth, and ὕδωρ, Water. An amphibious Serpent, so call'd, because it lives first in watery Places, whence it is call'd *Hydrus*; after which it shifts its Habitation, and lives on dry Ground, and thence has its compound Appellation *Chersydrus*. While it lives on Land, it is more poisonous than ordinary; for, in moist and watery Places, from its plentiful Feeding on humid Aliment, its Poison is rendered less pure; but, when it becomes an Inhabitant of the Land, its Poison becomes purer and more exalted. It resembles a small land Asp, only it has not so broad a Neck, which is the only remarkable Difference between the *Chersydrus* and the Asp.

The Bite of this Serpent, besides the common Symptoms incident to those who are bit by other venomous Serpents, such as a Tumor, a continual burning Pain, a Lividness and Feclency of the Part wounded, a Vertigo, Faintness, with bilious and fetid Vomitings, induces also strange and disorderly Motions of the whole Body, particularly of the Belly; and the Patient dies within three Days.

The common Remedies, and theriacal Antidotes, are of Service in this Case; in particular,

Take of Pills of Cypress, and of Myrtle-berries, each one Dram: Bruise them, and give them in Honey of Roses, or Mulsun; and to the Place affected apply Quick-lime, and the like, with Oil. *Actius, Tetrab. 4. Sermon. 1. Cap. 35.*

*Celsus, Lib. 5. Cap. 27.* advises two Drams of Allheal (*Panacea*) or Laser, or the Juice of Leeks, to be taken in half a Pint of Wine, and the Patient to eat plentifully of Savory. To the Wound he recommends the Application of Goats Dung, boil'd in Vinegar, or Barley-meal and Vinegar, or Rue or Cat-mint bruised with Salt, and Honey added thereto, which is also of equal Service against the Bite of the *Ceraustes*.

CHERVA. Cataputia. *Johnson.*

CHERUHUNDA. The *Solanum*; *fruticosum*; *Indicum*; *Fruitu rubro*. *Boerhaave, Index alter, Part 2.* See SOLANUM.

CHEUSIS, χεῦσις, from χέω, χεύω, or χύω, to pour out; so *Foefus* reads the Word, *Lib. 6. Epid. Sect. 8. Aph. 23.* and understands by it a Liquefaction or Fusion, that is, an Attenuation or Thinness of the Tears, to which πέλξος, or Crassitude, is opposed. He seems to be in the right; tho' all other Interpreters read χεῦσις, and take it for the Taste.

CHEZANANCE, χεζανάγκη, from χέζω, to go to Stool, and ἀνάγκη, Necessity, signifies, in general, any thing that creates a Necessity of going to Stool; but particularly, in *P. Ægineta*, is the Name of an Ointment prepared of Honey and Alum, and boil'd till it be red, with which the Anus is anointed, and thereby a copious Evacuation of the Belly is procured, tho' not without Labour and Difficulty. This *Paulus* has taken from *Oribasius, Synopsis. Lib. 3. Actius also, Tetrab. 1. Sermon. 3. Cap. 135.* gives the Name *Chezanance* to a purging Plaister applied to the Navel.

CHIA TERRA.

*Terra Chia*, Offic. *Charlt. Foss. 4. Worm. 8. Aldrov. Mus. Metall. 247. Matth. 1391. Calc. Mus. 125.* EARTH OF CHIOS.

Chuse such Earth as is whitish, inclining to an Ash-colour, and like the Earth of *Samos*. It is crusty and white, (*Oribasius* reads λεπτή, thin) but made up in Masses of different Forms, and has the same Virtues as the *Samian* Earth. It clears the Skin of Wrinkles, and brightens it, and causes a florid and lovely Colour not only in the Face, but over all the Body; and it is used in the Baths as a Smegma, to scour and cleanse the Skin, instead of Nitre. *Dioscorides, Lib. 5. Cap. 174.*

It is brought from the Island of *Chios* (*Scio*, in the *Archipelago*); and, among other things, is good for Ambustions. *Terra Samia*, or *Cimolia alba*, may be substituted in its stead. *Dale.*

CHIACUM COLLYRIUM, in *P. Ægineta, Lib. 7. Cap. 16.* is a Remedy for the Eyes, in which the dry Ingredients were bruised and prepared in *Aminæan*, *Falerian*, or sharp *Chian* Wine.

CHIADUS, in *Paracelsus*, means the same as *Furunculus*. *Castellus.*

CHIASMOS, χιασμός, is the Concourse or Meeting of any two Things under the Form and Figure of a Cross, or the Letter x *Chi*, whence it is named. The Adverbs *Chiaffi*, *χιαστί*, and *Chiasillos*, *χιαστικῶς*, signify the same thing: Thus

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the optic Nerves are said to meet *χιαστικῶς*, so as to cross each other. *Castellus.*

CHIASTOS, χιαστός. The Name of a Bandage in *Oribasius*, so call'd from its resembling a Cross, or the Letter x.

CHIBOU. See ICICARIBA.

CHIFFIR, CHIFIR, according to *Libanius*, in the Preparation of the Philosophers Stone, is call'd *Lapis Animalis*, as the Mineral is call'd *Chaos minerale*. But *Johnson* says, that the *Chifir minerale* is by some interpreted Gold, but that he rather takes it to be any Sulphur of the metalline Kind. *Castellus. Johnson.*

CHILIODYNAMON, χιλιοδύναμον, from χίλιοι, a thousand, and δύναμις, Virtue. An Epithet of the Herb *Polemonium*, in *Dioscorides, Lib. 4. Cap. 8.* bestow'd upon it on account of its many Virtues. See POLEMONIUM.

CHILIOPHYLLON, χιλιοφυλλον, from χίλιοι, a thousand, and φυλλον, a Leaf. The Herb *Millefolium*.

CHILLI. A Species of Indian Pepper. See PIPER.

CHILON, χείλων, one who has great Lips, or, in one Word, *Labeo*. Thus, among the Species of Fishes under the Class of *Capitones*, some are call'd *Chilones*, that is, *Labeones*. *Castellus.*

CHIMALATH, CHIMALATL. See CORONA SOLIS.

CHIMETHLON, χιμεθλον. See PERNIO.

CHIMIA. The same as CHYMIA, or CHEMIA.

CHIMOLEA LAXA. An obscure Term in *Paracelsus, de Morbo Gallico, Lib. 2. Cap. 4.* by which he intends to signify the Powder which is separated from the Flowers of saline Ores.

CHIMUS. A Term in *Paracelsus*, the Meaning of which is not certain; only he says, that *Chimus*, *Realgar*, and *Gold*, are all one Ore, and yet have each of them a different Nature and Virtue; but, from what follows, we may infer, that by *Chimus* we are to understand the Dross or sculent Mass of the Ore. *Castellus.*

CHINA, Offic. *Chab. 116. China vulgaris Officinarum*, *Ger. Emac. 1618. China Radix, C. B. Pin. 296. Ogillb. Chin. 1. 213. 2. 678. China Radix Officinarum, Park. Theat. 1578. China Radix, J. B. 2. 120. Raii Hist. 1. 657. Acoft. Clus. Exot. 274. China Orientalis seu Smilax aspera Chinesis Lampatam dicta in MSS. Herman Sankira, Smilax minus spinosa fructu rubicundo, radice virtuosa China dicta, Kempt. Amoen. Exot. 781. CHINA-ROOT.*

China-root is thick, tuberous, nodous, or full of Joints, light, ligneous, easily putrifies, is of a pale-red Colour on the Outside, and white within, of a farinaceous and earthy Taste, with something of Astringency, but has no Smell. It is supposed to be the Root of a rough sort of Smilax, call'd *Lampatam*, in *China*, where it grows plentifully; and, being exported from thence, is call'd *China*. They find also in *America*, and especially in *New Spain* and *Pern*, a Root much like this, but more oblong, and somewhat redder on the Inside; they call it *West Indian China*, but it is inferior in Virtue to the *East Indian China*, which comes from *China*, or the neighbouring Countries.

This Root was first known in *Europe* in the Year 1535, according to *Thevet*, in his Cosmography; and *Vesalius* seems to agree with him, when he informs us, in his Epistle concerning the Root of China, that while he was at *Venice*, and employ'd by the principal Doctors and Professors of Medicine in visiting the Sick, this Root was imported thither, and that it was highly commended, and extraordinary Effects were expected from it. Now *Vesalius* was born in the Year 1513, and consequently first entering upon the Practice of Medicine at *Venice* about the Age of two or three and twenty, when this Event happen'd, we must assign the Time of it about the Year 1535, or 1536, and the rather because we are assured by *Andreas*, in his *Bibliotheca Belgica*, that, in the Year 1537, *Vesalius* was public Professor of Anatomy at *Padua*.

The Decoction of this Root was prepared after the following Method for the Cure of the Venereal Disease:

They took an Ounce of fresh China-root, free from Putrefaction, and cut it into Bits, or thin Slices, and let them macerate four-and-twenty Hours in six or eight Pints of Spring-water, lukewarm; after this they boil'd it in a pretty large Earthen Pot, with a Cover, over a slow Fire, to the Consumption of one Third; then strained the Decoction, and set it aside in a Glass Bottle, stopp'd, keeping it in a tepid State for daily Use.

The Patient then, being first prepared by the Use of Evacuations, as Purgation, and Phlebotomy, if it was thought convenient, took a Draught of this Decoction warm, to the Quantity of ten or twelve Ounces, every Day, very early in the Morning, and compos'd himself in his Bed, well cover'd with Clothes, to sweat for two or three Hours. After this, wiping off the Sweat, he was permitted to rise out of his Bed, and, being well cloth'd, to walk about his Chamber; and after ten or twelve Days, if the Weather was mild, to walk abroad, taking



taking care to keep himself warm. As to Diet, he was indulg'd more Freedom, than if he had took a Decoction of Guaiacum; for he was allow'd to eat Chickens or Capons, roasted or boiled, without any Salt; but he was wholly to abstain from Wine, and to use nothing for his ordinary Drink but a warm Decoction of China-root. This Regimen was observ'd for four or five and twenty Days together, in which time the Cure was thought to be perfected. If the Patient was subject to be costive, they added some Leaves of Sena to the Decoction, or administered an emollient Clyster every other Day.

The Name and Grandeur of the Emperor Charles the Fifth soon brought this Medicine in Reputation; for this Prince, as *Vesalius* informs us, in his Epistle *De Radice Chinæ*, residing at *Brussels*, and labouring under the Gout, and an ill Habit of Body, and having made use of Guaiacum to no Effect, took a Resolution, of his own Head rather than the Advice of his Physicians, to try the Use of China-root, by which, if he did not obtain a perfect Recovery, he certainly found himself much better. Hence it came to pass, says *Vesalius*, that the neighbouring Physicians of Germany, understanding that the greatest Prince in the World had made use of China-root, fell into high Notions of this Remedy, and fancy'd themselves to be very deficient in their Art, if they did not know how to prepare and exhibit this Decoction; for which Reason they so extol'd the Virtues of it to their Princes as to put them upon inquiring at the Emperor's Court, and never cease soliciting, till they had obtained from the Court Physicians a full Account of its Administration.

But, to see the mutable Fortune of new Remedies, this Root of China, so much magnify'd for its Virtues, in a short time grew out of Repute. *Vesalius* himself, in the same Epistle, which was published in 1542. assures us, that he was firmly convinc'd by Experience, that a Decoction of China-root was far inferior to that of Guaiacum, for Excrescences and Tumors of the Bones, and malignant Venereal Ulcers. Of the same Judgment was *Cardan*, *Lib. de Radice Chynæ seu de Decoctionis*, 1548. *Brassavolus*, *Tract. de Radicis Chynæ Usu*, 1551. *Franco*, *Lib. de Morbo Gallico*, 1564. *Palmarius*, *Lib. 1. de Lue Venerea*, 1578. but most expressly *Gab. Fallopius*, *Tract. de Morbo Gallico*, 1560. Let no Use, says he, be made of this Root in the Lues Venerea; for I have try'd it three or four times, and could effect nothing with it. And, indeed, it has been a generally receiv'd Opinion, for a considerable time past, that China-root is of Service in the Gout, Sciatica, cedematous Tumors, Strumæ, Imbecillity of the Stomach, Hemiplegias, and in Ulcers of the Reins and Bladder, but to be of little Effect in the Lues; or if it be, perhaps, of any Use, yet to be far inferior in Virtue to Guaiacum. *Astruc. de Morb. Vener. p. 112.*

The Eastern China-root is of a yellowish-brown Colour on the Outside, and white or reddish-white within. It comes over in flattish Pieces, long, and full of Knots, of a firm, smooth, even Body when cut, of very little Taste.

This is the Root of a sort of *Smilax aspera*, described by *Acosta*, *Garcias ab Horto*, and others; and lately, in the *Museum Muscorum* of *Valentini*, at the End of it, in the *India Literat. Epist. 34.* tho' *Commelin* makes it a Species of *Senecio*, in his *Catalog. Plant. usual.* and calls it *Senecio Asiaticus*, *Jacobæ folio radice lignosa*, *China Officinarum*, which is not likely. It bears Leaves something like those of the occidental Sort, but more oval; the Stalk is more prickly, with several Tendrils or Claspers, and the Berries of a yellow Colour. The best comes from *East-India*.

CHINA OCCIDENTALIS Pharmacop. *China spuria nodosa*, C. B. Pin. 297. Raii Hist. 1. 658. *Pseudo-china Radix*, Chab. 116. *Pseudo-china*, Ger. Emac. 1618. Park. Theat. 1579. *Pseudo-china Radix Clusii*, J. B. 2. 122. *Kaballoffia Rivibumavel*, *Smilax Indica spinosa folio Cinnamomi*; *Pseudo-china quibusdam*, Mus. Zeylan. 22. *Smilax aspera, fructu nigro radice nodosa magna levi farinacea China dicta*, Cat. Jam. 105. Hill. Ejusd. 231. Tab. 145. *Jupicanga*, Pison. ed. 1648. p. 99. *Jupicanga vulgo Radix China*, Ejusd. ed. 1658. p. 257. *Olcacatzan seu Pahuatlanica China Mexicana*, Hern. 212. *Altera Olcacatzan seu Pahuatlanica*, Nieremb. 321. AMERICAN CHINA.

This is a Root which comes from *Jamaica* in long round Pieces, full of Knots or Joints, whitish without, and red within, of little or no Smell or Taste. It is a Root of a kind of *Smilax*, call'd by Sir *Hans Sloane*, in his *Catalogue of Jamaica Plants*, *Smilax aspera, fructu nigro, radice nodosa, magna, levi, farinacea, China dicta*. It has long climbing Branches, a little prickly, with large, firm, nervous, roundish-pointed Leaves, not at all prickly. The Fruit, or Berry, is round and blackish, about as big as a Juniper-berry.

I have known some Physicians prefer this to the Oriental China, especially in scrophulous Cases, and in Consumptions, where there were any Suspicions of their arising from a scrophulous Cause. *Miller's Bot. Off.*

CHINENSE, vel SINENSE POMUM. The China Orange. See AURANTIUM.

CHINISCI, in *Oribasius, Lib. de Machinament. Cap. 4.* are Pegs, such as are in a Harp, and serv'd instead of Fibulæ, or Braces, to fasten the Axes or cross Beams; for Ornament's sake they were carv'd in the Figure of a Goose's Head.

CHIOLI, in *Paracelsus, de Gallic. Ulcer.* means the same as *Furunculi*. See FURUNCULUS.

CHIRAGRA, *χειραγρε*, from *χείρ*, the Hand, and *ἀγρε*, a Capture or Seizure. The Gout in the Hands. See ARTHRITIS.

CHIRAPSIA, *χειρψία*, from *χείρ*, the Hand, and *ψι*, a Touching or Handling, in *Cælius Aurelianus, Acut. Morb. Lib. 3. Cap. 18.* is express'd by *Manuum Contactus*, and apply'd to the Rubbing of a Place affected with the Itch, or a sore Eye.

CHIROMANTIA, *χειρομαντία*, from *χείρ*, the Hand, and *μαντεύομαι*, to prophesy or divine. The Art of divining by the Lines and Figures of the Hand.

CHIRONAX, *χειρώνας*, from *χείρ*, the Hand, and *ἀράω*, to command, in *Hippocrates* is a manual Artificer, or Handicraftsman.

CHIRONIUM, *χειρώνιον*, an Epithet of a malignant inveterate Ulcer, difficult to be cured, with a hard, callous, and tumid Margin, so call'd from *Chiron* the Centaur, who is said to be the first who knew how to cure them. It is also called *Telephium*. *Galen, M. M.*

CHIRONOMIA. See CHEIRONOMIA.

CHIROTECHNES, *χειροτέχνης*, from *χείρ*, the Hand, and *τέχνη*, an Art, is properly a manual Artist, and so is the same as *CHIRONAX* before; but *Hippocrates* uses the Word for Artist in general; in which Sense, *Lib. de prisca Med.* he says a Physician is *χειροτέχνης*.

CHIOTRIBIA, *χειροτερίβια*, from *χείρ*, the Hand, and *τείβω*, to exercise, in *Hippoc. παρρηγυελ.* is the Qualification of being well versed in the Practice of Medicine.

CHIRURGIA, from *χείρ*, the Hand, and *εργον*, Work. Strictly manual Operation, that is, Surgery, the Part of Medicine which is employ'd in manual Operation.

As I have given some Account of the Progress of Surgery, together with Physic, in the Preface, it remains, that I give a Catalogue of Chirurgical Authors, having first inserted the ensuing Quotation, by way of Excuse for the long and many Extracts I have given from the ancient Surgeons.

Dr. *Freind*, in his History of Physic, gives the Judgment of *M. C. Bernard*, whom he represents as an Honour to his Faculty and Country, on the ancient and modern Writers in Surgery.

"If we inquire," says he, "into the Improvements which have been made by the Moderns in Surgery, we shall be forced to confess, that we have so little Reason to value ourselves beyond the Antients, or to be tempted to condemn them, as the Fashion is among those who know little, and have read nothing, that we cannot give stronger or more convincing Proofs of our own Ignorance, as well as our Pride. I do not pretend, that the Moderns have not at all contributed towards the Improvement of Surgery; that were both absurd and injurious, and would argue as much Folly as that which I am reproaching; but that which I am contesting for is, that it consists rather in refining and dressing up the Inventions of the Antients, and setting them in a better Light, than in adding many important ones of our own. Whether it be, that the Art of healing external Hurts, being principally the Subject of our Senses, was earlier study'd, and therefore capable of being sooner brought to a greater Degree of Perfection, than the other Branches of Medicine; or that the Majority of the mere Professors having been, for some Ages, illiterate and empirical, it hath not been advanced and cultivated so as it might have been, had they been better qualify'd than they generally were, and do yet, for the greatest part, continue to be: For a Testimony of which, that exceeding Paucity of good Writers which occur in Surgery, when compared with those in most of the other learned Arts and Sciences, is, in my Opinion, sufficient; and yet, were they fewer, it would, in the Judgment of these *Scioi*, be no great Detriment to the Art: For the Folly of which Assertion, the best Excuse that can be made seems to be, that, because some Methods of Proceeding in Surgery and Physic, which are incommunicable, and to which every Man must be directed by his own Judgment and natural Sagacity, not being to be found in those Authors, whom these opinionated Practitioners have had the Luck to consult, they are led immediately to despise all Reading, as useless and uninstruative; especially that of the Antients, who do not generally, I confess, write to Novitiates and Fools, or to those who will be always such.

"But whoever hath been conversant in their Writings, and hath the Opportunity and Capacity of comparing and judging from his own Experience, will readily confess, that one thing, which does not a little recommend the Reading of them beyond most of the Moderns, is, that they are more accurate in describing the Pathognomonics, and more just and nice in distinguishing the Species of Tumors and Ulcers, than



“ than our more refined Moderns are. If this Age hath par’d  
 “ away any rude and superfluous Methods of Practice, as it  
 “ must be confess’d they have, it cannot be demonstrated, that  
 “ they were all derived from the Antients, but were, in a  
 “ great measure, introduc’d by ignorant and barbarous Pro-  
 “ fessors of a much later Date.

“ There is no Question, but that the principal Improve-  
 “ ments, which have these later Ages been made in Surgery,  
 “ are owing chiefly to the Discoveries which have been made  
 “ in Anatomy, by which we are better enabled to solve many  
 “ of those Phenomena, which were before inexplicable, or ex-  
 “ plain’d amiss; the most important Part, in the mean while,  
 “ (I mean the Art of Healing, to which all the others ought  
 “ to be subservient) remaining very little better than the An-  
 “ tients left it.

“ As an uncontested Proof of what I say, I appeal to all  
 “ those Bodies of Surgery, which have been hitherto pub-  
 “ lish’d by the most learned and celebrated of the Moderns,  
 “ being all manifest Transcripts from one another, and the best  
 “ of them from the Antients. But this may indeed be said  
 “ in Defence of the Moderns in this Particular, that even  
 “ transcribing is not their Invention, though it be their Practice;  
 “ for *Ætius* and *Ægineta* have borrowed not a little of what  
 “ they have, from *Galen*; and *Marcellus Empiricus* more grossly  
 “ from *Scribonius Largus*, without so much as remembering  
 “ his Name among the rest of those Authors, to whom he  
 “ was less beholden.

“ Among all the systematical Writers, I think there are  
 “ very few, who refuse the Preference to *Hieron. Fabricius*  
 “ *ab Aquapendente*, as a Person of unquestion’d Learning  
 “ and Judgment; and yet is not he ashamed to let his Readers  
 “ know, that *Celsus* among the *Latins*, (who, he tells us, is  
 “ *Mirabilis in omnibus*, and advises, in *Horace’s* Words,  
 “ *Nocturna versare Manu, versare diurna*) *Paulus Ægineta*  
 “ among the *Greeks*, and *Albucasis* among the *Arabians*,  
 “ whom I am unwilling to place among the Moderns, being  
 “ in the Number of those whom our modern Judges reject,  
 “ (either because they never read him, or because he had the  
 “ Misfortune to live six hundred Years since) are the Trium-  
 “ virate to whom he principally stands indebted, for the As-  
 “ sistance he had receiv’d from them in composing his excel-  
 “ lent Book.

“ But how many Operations are there now in Use, which  
 “ were unknown to the Antients? I fear, that upon a due  
 “ Inquiry, there would be more useful ones found to be  
 “ omitted or discontinued, than to have been invented by us.”  
*Freind’s History of Physic.*

#### CATALOGUE of CHIRURGICAL AUTHORS.

##### A.

- Abeille*, le parfait chirurgien d’armée, & le traité des Playes  
 d’Arquebusade, &c. 8vo. A Paris, 1686.  
*Academæ Petropolitane commentarii*. Petropoli, Tom. 1.  
 1728. 4. Tomus 2. 3. & 4. annis subsequentibus.  
*Acta Eruditorum Lipsiensia*.  
*Acta Physico-medica acad. nat. curios.* Vol. 1. 4to. Norib.  
 1727. & Vol. 2. 1730. Vol. 3. 1733. & Vol. 4. 1737.  
*In the three last there are many chirurgical Observations.*  
*Actuarii* (Jo.) methodus medendi. See the Article *ACTU-*  
*ARIUS*.  
*Aderlafs-büchlein* (neu vermehrtes) oder Bericht vom Ader-  
 lassen und Schröpfen. In *High Dutch*, 8vo. Norinberg,  
 1665. *This is a Treatise on Phlebotomy and Scarification.*  
*Adolphi* (Chr. Mich.) trias dist. chirurgicarum, 1.) de Spina  
 ventosa; 2.) de Ligaturis dolorificis; 3.) de morborum per  
 manuum attractatum curatione, 4to. Lipsi. 1730.  
 — de vinculis chirurgicis dissert. 4to. Lipsi. 1730.  
*Æginetæ* (Pauli) Opera. *This is an excellent Author. See*  
*the Article ÆGINETA*.  
*Actii libri universi*. See the Article *ÆTIUS*.  
*Agricola* (Jo.) *Chirurgical Institutions*. In *High Dutch*, 12mo.  
 Francof. 1638.  
 — Wund-artzeney, vermehrt und verbessert, 8vo. Nürnberg.  
 1674. *That is, Surgery improv’d and augmented.*  
 — Neve Feldscherer-kunst, 12mo. Dresd. 1716. In  
*High Dutch*, *that is, The new Surgery.*  
 — (Georg.) de peste, 8vo. Swinfurt. 1607.  
*Alberti* (Mich.) *Introductio in Universam Medicinam*, 4to.  
 Halæ, 1719.  
 — dissert. de Hydrocephalo, 4to. Halæ, 1725.  
 — de Nasi Excrecentia, 4to. c. fig. ibid. 1729.  
 — de fœtus mortui cum secundinis extractione dissert. 4to.  
 ibid. 1737.  
*Albini* (Bern.) diss. de Fonticulis, 4to. Franc. ad Viadr.  
 1681.  
 — dissert. de Paracentesi Thoracis & Abdominis, 4to.  
 ibid. 1687.

- Albini* (Bern. dissert.) de Paronychia, 4to. ibid. 1694.  
 — de Cataracta, 4to. c. fig. ibid. 1695.  
 — de Partu difficili, ibid. 1696.  
 — (Bern. Siegf.) Index Supellectilis anatomice Ravianæ,  
 cum Ravi vita & calculorum curatione, 4to. c. fig. Lugd.  
 Batav. 1725.  
*Albrechti* (Jo. Gunth.) dissert. de Enematum, Evacuantium,  
 Alterantium, ac Nutrientium usu, 4to. ibid. 1698.  
*Albucasis*, chirurgorum primarii, Opera. See the Article *AL-*  
*BUCASIS*.  
*Alghisi* (Tomaso) Lithotomia, 4to. ibid. 1708. c. fig. In  
*Italian*.  
*Alliot* (J. B.) Traité du Cancer, 12mo. Paris, 1698.  
*Alpini* (Prosp.) de Medicina Ægyptiorum, 4to. ibid. 1645.  
 Lugd. Bat. 1719. 4to. *This Book contains many curious*  
*Particulars relative to the Egyptian Surgery.*  
*Alrutz* (Jo. W.) Vade mecum, with the chirurgical Observa-  
 tions of George Clacius, 8vo. Hanoveræ, 1722. In *High-*  
*Dutch*.  
*Amand*. (Pierre) Observation sur la pratique des Accouche-  
 mens, 8vo. Paris, 1714.  
*Ammanni* (Pauli) Medicina critica, 4to. Stadæ, 1677. It con-  
 tains many Things relative to Surgery.  
 — diss. de Resonitu sive Contrahistura, Lipsiæ, 1674.  
 4to. extat etiam in Parænesi ejus ad discipulos, 12mo. Lipsi.  
 1677.  
 — praxis vulnerum lethalium, 8vo. Francof. 1690.  
*Andry* (Nic.) Examen de divers points de l’Anatomie, de  
 Chirurgie, de Physique, de Medicine, 8vo. Paris, 1725.  
*Anel*. (Dominique) l’Art de Succer les Playes sans de servir  
 de la Bouche d’un Homme, c. fig. 8vo. Amst. 1707.  
 — Methode pour guerir les Fistules Lacrymales, 4to. Tu-  
 rin, 1713.  
 — discours apologetiques pour la nouvelle Methode de  
 guerir les Fistules Lacrymales, 4to. Turin, 1714.  
*Angelini* (Facondini) Methodus pro venæsectione eligenda, 4to.  
 Patav. 1649.  
*Anglici* (Jo.) Praxis Medica, 4to. Aug. Vind. 1595. In  
 this there are many Things relative to Surgery.  
*Anonymi* Abhandlung von Erzeugung der Menschen. *This is*  
*a Treatise of Midwifry in High Dutch, translated from*  
*the Low Dutch*.  
 — L’Art de Saigner, 8vo. à Paris, 1689.  
 — The Birth of Mankind, with Figures, 4to. Lond.  
 1654.  
 — Catechismus obstetricum, in *High Dutch*, 12mo. Ar-  
 gentorat, 1722.  
 — Charitable Surgeon, 8vo. Londin. 1708.  
 — Chirurgia. *This is a High Dutch Book of Surgery*  
*with Instruments and Figures, taken from Albucasis, in Fol.*  
*Argentor.* 1540.  
 — Le Chirurgien charitable, par J. A. G. Maître Chi-  
 rurgien, 8vo. A Paris, 1656.  
 — Chirurgus, Chymicus & Medicus curiosus, 8vo. Dresd.  
 1719.  
 — Der weitgereifte und wohl practicirte Barbierer, 8vo.  
 Ratisbonæ, 1709. *The practical Surgeon.*  
 — Chirurgus expertus, 8vo. Hamb. 1689. Germanice.  
 — Chirurgyens Gilde in Amsterdam, &c. *That is the*  
*Statutes, Laws, and Privileges relative to Surgeons in Am-*  
*sterdam. In Low Dutch.*  
 — Clymatica nova, Kilise, 4to. 1622. *The Author of*  
*this was Jo. Dan. Major.*  
 — Colle-tanea Chirurgica, ann. 1721. & 1722. 8vo. Ha-  
 noveræ, 1722. In *High Dutch*.  
 — Cystotomia Hypogastrica. In *English*, 4to. Lond.  
 1724.  
 — Ansteckender Seuche, welche dieses, 1713. Jahr  
 in das Ertz-herzogthum Oesterreich eingefallen, grund-  
 liche nachricht, samt denen benöthigten Hülff-mitteln, grund-  
 liche nachricht, samt denen benöthigten Hülff-mitteln, Ra-  
 tisbonæ, 4to. 1713. *This is a Treatise on the Plague in*  
*Austria, which happen’d in 1713. wrote in High Dutch.*  
 — Enchiridium Chirurgicum, 8vo. Patav. 1593.  
 — An *High Dutch* Treatise on Illues, in 4to. hinc anno  
 & loco.  
 — Medicinisches und Chirurgisches Schatzkästlein, 8vo.  
 Frf. & Lipsi. 1709.  
 — l’Indecence aux Hommes d’accoucher les Femmes,  
 & l’Obligation des Femmes de nourir leurs Enfants, 12mo.  
 à Trevoux, 1708.  
 — Journal de Medicine, ou Observations de plus fameux  
 Mediciens, Chirugiens & Anatomistes de l’Europe, tirées  
 de Journaux des Pais Etrangers, & Memoires particulieres,  
 envoyez à Monsi. de la Roque, 8vo. Paris, 1683.  
 — Krebs Cur, (Bewehrte) *The Cure of Cancers*, 4to.  
 Jena, 1717.  
 — Libellus 1.) de Morbis Oculorum; 2.) De Herniis; 3.)  
 De Tinea Capitis. 4.) De dentibus & Ulceribus antiquis. Ger-  
 manice, 4to. Argent. 1538.

Anonymi



- Anonymi Medici antiqui Græci, 4to. Basilæ, 1584.  
 ——— Medicus, nisi Chirurgus, semiplenus vel nihil est, 4to. Magdeburgi, 1622.  
 ——— Medicus Theoria & Praxi Instruētus, sive de internorum & externorum Morborum Curatione, 8vo. Genevæ, 1690.  
 ——— Nouvelle Methode d' Operations de Chirurgie, 12mo. à Paris, 1693.  
 ——— Nouvelles Decouvertes sur toutes les Parties de la Medicine, 12mo. A Paris, 1679.  
 ——— Observationes Medico-chirurgicæ de variis rebus Medicis & Chirurgicis. Germanice, 8vo. Ascherlebiæ, 1715.  
 ——— The Midwives Catechism. In *High Dutch*, 12mo. Argent. 1722.  
 ——— Obstetrix Coburgiaca, 12mo. Hildburghusæ, 1700. In *High Dutch*.  
 ——— Saxonica, 8vo. Francof. & Lips. 1701. In *High Dutch*.  
 ——— Operations de Chirurgie, 12mo. Paris, 1692.  
 ——— Von Pestilentialischen Drusen, Beulen und Carbunculen, 8vo. 1686. sine loco. *That is, of pestilential Tumors, Bubos, and Carbuncles.*  
 ——— Synopsis doctrinæ & Medicinæ Vulnerum, 4to. Wittebergæ, 1699.  
 ——— Theatrum Sympatheticum sive de Pulvere Sympathetico & Unguento armario, 4to. Norimberg. 1662.  
 ——— Vade Mecum Anatomico-chirurgicum, 8vo. Hannoveræ, 1718.  
 ——— Verhandeling van de Voortteeling en het Kinderbaren. In *Low Dutch*. *That is, A Treatise of the Generation and Birth of Man, with Figures*, 8vo. Amsterdam, 1688. *This Book was also published in High Dutch, Francof. 1706.*  
 ——— Unterricht von Schwürigen, offenen Schenckeln. *That is, the Method of curing old Ulcers of the Legs*, by D. D. K. meaning David Kellner, Nordhufæ, 1688.  
 Aquapendente. See FABRICIUS.  
 Arantius (Jul. Cæf.) de Tumoribus, 4to. Venet. 1587.  
 ——— Commentarius in Libr. Hippocr. de Vulneribus Capitis, 8to. Lugd. 1579. & 1639. 12mo.  
 Arcæus (Franc.) de reſta curandorum vulnerum ratione, 8vo. Antwerp. 1574. & 12mo. Amst. 1658.  
 ——— The same in *High Dutch*, intitled, Von den Wunden, &c. 8vo. Nuremberg, 1674. with Figures.  
 De Angellata (Petr.) Chirurgia, Fol. Venet. 1499. & 1531. cum Albucaſi.  
 L' Art de faire les Rapports en Chirurgie, 8vo. A Paris, 1703.  
 ——— de Saigner, 8vo. à Paris, 1689.  
 Astruc (Jo.) de Morbis Venericis, 4to. Lutet. Paris. 1736.  
 Augenius (Horat.) de Ratione Curandi per Sanguinis miſſionem, Fol. Francof. 1598.  
 Avicennæ Opera omnia. See the Article AVICENNA.  
 B.  
 Badilius (Valerius) de ſecunda Vena in Pueris, 4to. Veronæ, 1606.  
 Baieri (Jo. Jac.) Diſſertatio de Fræno linguæ, 4to. Altorf. 1706.  
 ——— de Turundis, 4to. ibid. 1707.  
 Baldutius de Tumoribus, 4to. Venet. 1612.  
 Banyer (Henry) Microtechnie; or, *Methodical Introduction to the Art of Surgery*, 8vo. Lond. 1717.  
 Barbette (Pauli) Chirurgia, 8vo. Amſtel. 1663. poſtea cum notis Muysii, 12mo. ibid. 1693.  
 ——— Opera omnia, cum Notis Mangeti, 4to. Genevæ, 1688.  
 The ſame in *High Dutch*, under the Title of Mediciniſche, Chirurgiſche, und Anatomiche Schriften, 8vo. Lips. 1718.  
 Barbierer (der weitgereiſte und wohl practicirte) *That is, the Surgeon well vers'd in Practice*. Regenf. 1709. 8vo.  
 Bartholini (Th.) Aneurysmatis diſſecti hiſtoria. Accedit Jo. Von Horn ejuſdem Argumenti Epistoſa, 8vo. Panormi, 1644.  
 ——— -- Hiſtoriæ Anatomicæ Centuriæ VI. 8vo. Hafn. 1654. 1657. & 1661.  
 ——— -- Epistoſæ Medicinales, Centuriæ IV. 8vo. Hafn. 1663. 1667.  
 ——— -- de Inſolitis partus Humani viis, cui & Veſſingii Obſervationes Anatomicæ & Chirurgicæ junguntur, 8vo. Hafn. 1664.  
 ——— Acta Medica & Philoſophica Hafnienſia, 4to. Hafn. Vol. 1. 1673. Vol. 2. 1675. Vol. 3, 4. 1677. Vol. 5. 1680. c. fig.  
 Bartiſch (Georg.) Ὀφθαλμοδουλία ſive Augendientſt. *This is a High Dutch Treatiſe on the Diſorders of the Eyes*, Fol. Drefdæ, 1583. with Figures.  
 Baſſius (Henr.) de Faſcis & Vinculis Chirurgicis. Germanice, 8vo. Lips. 1720. c. fig.  
 ——— Commentationes in Nuckii Experimenta Chirurg. Germ. 8vo. Halle, 1728.  
 ——— Obſervationes Anatomico-chirurgico-medicæ, 8vo. Halle, 1731.

- Baffins (Hern.) de Fiſtula Ani, 4to. Halæ, 1718. c. fig.  
 Bauhini (Caſp.) de Hermaphroditum & Monſtroſorum partuum natura, 8vo. Oppenh. 1614.  
 Bautzmanni (Jo. Chr.) vernünftiges Urtheil von todlichen wunden. *This is a High Dutch Treatiſe on the Judgment to be found of mortal Wounds*, 12mo. Lips. 1717.  
 Bazzicalune (Aſcanius Maria) novum ſyſtema Medico-mechanicum, & nova Tumorum Methodus, 4to. Parmæ, 1701.  
 Becke (Dav. Vonder) de Procidencia Uteri, 8vo. Hamb. 1683. cum fig.  
 Becker. (Jo. Conr.) Παιδοκοτορία Inculcata ad Servandam puerperam, 4to. Gieſſæ, 1729.  
 ——— (Jo. Frid.) de Fiſtula Urethræ virilis diſſert. 4to. Halæ, 1728.  
 Beckher (Dan.) de Cultrivoro Pruffico Germ. 4to. Regiomonti, 1643. Latine, 12mo. Lugd. Bat. 1640.  
 Behrens (Rud. Aug.) Triga Caſuum memorabilium, (Chirurgici imprimis argumenti) 4to. Wolffebutelæ, 1727.  
 ——— de Cerebri vulnere non ſemper & absolute Lethali, 4to. Franc. ad Moen. 1733.  
 Beieri (Godofr.) diſſ. de Arteriotomia, 4to. Jenæ, 1673.  
 Belloſte Chirurgien d' Hoſpital, 8vo. 1707.  
 Benevoli (Anton.) Lettera ſopra due oſſervationi fatte intorno alla Cateratta, 4to. Fiorez. 1722.  
 ——— (Antonio) nuova propoſitione intorno alla Caruncula dell Urethra & della Cateratta glaucomatoſa, 8vo. ibid. 1724.  
 ——— Maniſeſto ſopra alcune accuſe contenute in uno certo Parere del Signor Pietro Paoli, Ceruſſeo in Lucca, 4to. ibid. 1730.  
 ——— Giuſtificatione delle Replicate accuſe del Signor Pietro Paoli, 4to. ibid. 1732.  
 Berdoti (Leopold. Eman.) diſſ. de Paronychia, 4to. Baſil, 1731.  
 Berengarii (Jac.) Carpi de Fractura Cranii liber aureus, cum fig. 4to. Bonon. 1518. & Venet. 1535. idem 8vo. Lugd. Bat. 1639.  
 Berenger (N.) Traité des Descentes & des Maux de Ventre, 8vo. A Paris, 1701. cum fig.  
 Bergenii (Jo. Georg.) diſſ. de Parotidibus, 4to. Franc. ad Viadr. 1717.  
 Berolinenſis Academiæ regiæ Miſcellanea, 4to. Berolini, 1710. cum continuationibus, variis poſtea annis Impreſſis.  
 Berolinenſium Medicorum acta, 8vo. Berolini, 1717. & ſeq. cum figur.  
 In the two laſt many Chirurgical Obſervations are interſpers'd.  
 Bertapaliæ Chirurgia, juncta cum Guid. de Cauliaco in arte Chirurgica, Fol. Venet. 1546.  
 Beverlini (Rud. Phil.) de Luxatione & Fractura Femoris, 4to. Altorf. 1719.  
 Beverovicii (Jo.) Exercitatio de Calculo, 12mo. Lugd. Bat. 1633. it. 1638. & 1641.  
 ——— -- Exercitatio in Hippocratis Aphoriſmum de Calculo, 12mo. Lug. Bat. 1641.  
 ——— -- His Surgery in *High Dutch*; *this is contain'd in his Works*, 8vo. Francof. 1671. in Fol. ibid. 1674.  
 Beynon (Eliæ) Barmhertziger Samariter Germanice, 12mo. Jenæ, 1684. *That is, The Good Samaritan, &c. with an Appendix concerning Midwifry.*  
 Bidloi (Godofr.) Exercitationes Anatomico-chirurgicæ, 4to. Lugd. Bat. 1708.  
 ——— Opera Anatomico-chirurgica, 4to. ibid. 1715.  
 Biumi (Paul. Geronim.) Scrutinio teorico pratico di notomia e cirugia, 8vo. Mediolani, 1712.  
 Blancardi (Steph.) Surgery. In *Low Dutch*, 8vo. Amſterd. 1680. In *High Dutch*, Hanov. 1692.  
 ——— Colleſtanea Medico-phyſica, 8vo. Amſtel. 1688.  
 Blegny (Nic.) Zodiacus Medico Gallicus, ſive Miſcellanea Medico-phyſica Pariſienſia, cum Tract. de Herniis & de Lue Venerea, 4to. Genev. 1680.  
 ——— des Maladies veneriennes, 12mo. Amſt. 1696.  
 Blondii (Mich. Angeli) Scripta Chirurgica, in Theſauro Chirurgiæ Uffenbachii, in Fol. Francof. 1610.  
 Boccacini (Antonii) deſinganni Chirurgici per la cura della ferite, Ulcere, e ſeni, 8vo. Venetiis, 1713. 1714. 1715.  
 Bohnii (Jo.) de Officio Medici Duplici, Clinico & Forenſi, Lips. 1704.  
 ——— de Renunciatione Vulnerum, 8vo. Amſt. 1710. & Lips. 4. 1711.  
 ——— His Surgery. In *High Dutch*, 8vo. Brunſ. 1732.  
 ——— diſſ. de Trepanationis difficultatibus, Lips. 1694.  
 ——— Revulſione Cruenta, ibid. 1704.  
 Bokelman (Andr.) & Bonaventura's Controversies concerning the Extraction of the dead Fetus. In *Dutch*. Amſt. 1677.  
 Bolognini (Angeli) de Cura Ulcerum, fol. Frf. 1610. in Theſauro Uffenbachii.  
 Boneti (Theophil.) Sepulchretum ſive Anatomia practica, fol. Genevæ, 1679. 1700.  
 Bonham (Th.). The Surgeon's Cloſet, 4to. Lond. 1630.



- Bontekoe (Cornel.) *His Surgery in Dutch*, 8vo. Gravenh. 1680. *and in High Dutch*, 8vo. Hannoveræ, 1682.
- *Grundsätze der Medicin und Chirurgie*, 8vo. Aug. Vind. 1721. *That is, The Foundation of Physic and Surgery.*
- Borrichii (Olai) de Calculorum generatione in Macro & Microcosmo, cum appendice Josephi Lanzoni, 12mo. Ferrariae, 1687.
- Bosii (Casp.) *diff. de Obstetricum Erroribus*, 4to. Lipsiæ, 1729.
- Botalli (Leonh.) de Sclopetorum Vulneribus, 12mo. Lugd. 1560. 1565. it. 8vo. Venet. 1566. & 1598. it. Francof. 1575. 4to.
- de Curatione per sanguinis Missionem, venæ Sectionem, Scarificationem, & Hirudines, 8vo. Lugd. Bat. 1577. & Antwerp. 1583.
- *Opera omnia Medica & Chirurgica*, 8vo. Lugd. Bat. 1660.
- *A Treatise on the Venereal Disease, and Gun-shot Wounds. In High Dutch*, 8vo. Norimb. 1676. *To which is added, Tassinus's Surgery.*
- Boulton (Rich.) *System of rational and practical Surgery*, 8vo. Lond. 1713.
- *Phylico-chirurgical Treatises of the Gout, King's Evil, the Lues Venerea and Intermitting Fevers*, 8vo. *ibid.* 1715.
- Bourgeois (Louyse) *Liber de arte Obstetricandi*, 4to. Oppenheim. 1619. item, 4to. Hanovizæ, 1652.
- *Observations sur la Sterilité, perte de Fruit, Fécondité, les Accouchemens & Maladies des Femmes & Enfants nouveau nez*, 8vo. à Paris, 1626. Belgice, 8vo. Delft. 1658.
- Brandii (Mich.) *diff. de Causis Fracturæ Ossium absque violenta causa externa*, 4to. Groeningæ, 1722.
- Braueri (Jo. Jac.) *Tract. de formulis Medicamentorum, sive Experimenta Medica & Chirurgica*, 8vo. Frf. 1717.
- Brisscau *traité de la Cataracte & du Glaucoma*, 12mo. à Paris, 1709. c. fig.
- Brissot (Petr.) & Moreau de Sanguinis missione, præsertim in Pleuritide, 8vo. Lutet. Paris. 1622. item, Venet. 1539. cum Matth. Curtii & Victoris Trincavelli de eadem re libellis.
- Browne (Jo.) *A complete Discourse of Wounds*, 4to. Lond. 1678.
- *Adenochoiradologia; or, an Anatomic-chirurgical Treatise of Glandules and Strumas, or King's-evil Swellings; together with the Royal Gift of Healing, or Cure thereof by Contact or Imposition of Hands, perform'd for above 640 Years by our Kings of England, in 4to.* Lond. 1684.
- Bubben (Jo.) vom Blutlassen, 8vo. Gothæ, 1729. *An High Dutch Treatise on Phlebotomy.*
- Buchneri (Andr. Eliæ) *diff. de Aëris externi noxis in vulnerum curatione*, 4to. Erford. 1737.
- *ejusdem Miscellanea Physico-medico-mechanica*, 4to. Erfurt, 1731. & seq.
- Budæi (Gottl.) *Medico-chirurgical Miscellany, in High Dutch*, 4to. Lipsiæ, 1731.
- Burchardi (Christ. Martin.) de partu difficili, 4to. Rostoch, 1726.
- de Tumoribus Scirrhis, 4to. Rostoch, 1727.
- -- *Chirurgiæ notitia Medico necessaria*, 4to. *ibid.* 1727.
- Burgers, (Petri) &c. *A Treatise of Surgery in High Dutch*, 8vo. Regiomonti, 1674. & Hanover. 1692.
- Burgmanni (Petri Christoph.) *Dissertatio, num intermissa funiculi Umbilicalis Ligatura Mortem inferre queat*, 4to. Rostoch, 1734.
- Burres (Laur.) *Chirurgia Germanica*, 4to. Erfurt. 1544.
- Burri (Franc. Jos.) *Epistolæ duæ de Cerebro, & artificio oculorum humores restituendi*, 4to. Paris, 1669.

## C.

- Caius (Bernh.) de Vesicantium Ufu, 4to. Venet. 1606.
- Calmetei (Anton.) *Enchiridion Chirurgicum*, 8vo. Paris, 1564. & 1667. *in Italian*, 8vo. Venet. 1605. *in French*, 12mo. Lyon. 1600.
- Camerarii (Eliæ Rudolph.) *diff. de Fractura cum vulnere*, 4to. Tubing. 1693.
- *Historia Pleuritidis & Abscessus Pectoris*, 4to. *ibid.* 1690.
- de Clymatibus, 4to. *ibid.* 1688.
- (Rud. Jacob.) *diff. de Bubone & Carbone*, 4to. *ibid.* 1713.
- Cantarini (Angeli.) *Chirurgia practica, accomdata al uso scolaresco*, 4to. in Padoua, 1715.
- Capelluti (Roland.) *Tractatus de Curatione Apostematum pestiferorum*, 8vo. Francof. 1642.
- Carcanus (Jo. Bapt.) de Vulneribus Capitis, 4to. Mediolani, 1583.

- Caëlii (Jo. Sam.) *Elementa Chirurgiæ Medicæ*, 8vo. Buding. 1727.
- Casalenii (Jo. Ant.) de secunda vena in Pleuritide Revulsionis Gratia, 4to. Venet. 1605.
- Caspius (Georg.) de Cautionibus in sanguinis missione, 8vo. Basil. 1579.
- Casseri (Julius) de Vocis auditusque Organis, Fol. Ferrar. 1600. *In this Work the Author treats of Laryngotomy, and illustrates the Operation with Figures.*
- Castellani (J. M.) *Phylacterion Phlebotomiæ & Arteriotomiæ*, 8vo. Argentinzæ, 1628.
- Castro (Jac.) de Inoculatione variolarum, 8vo. Hamburgi, 1722.
- Cauliaci (Guidonis) *Chirurgia*, Fol. Venetiis, 1499. it. 8vo. Lugd. 1559. Belgicæ, 4to. Amst. 1646.
- *ars Chirurgica, una cum Chirurgia Brunii, Theodorici, Rolandi, Lanfranci, Bertapaliæ & Saliceti*, Fol. Venet. 1546.
- *sive a Cauliaco Chirurgia cum Notis Jouberti*, 4to. Lugd. 1585.
- *Abregé de Chirurgie de Guy de Chauliac, par Verduc*, 8vo. à Paris, 1704. & 1716.
- Causapé (Anicet.) *Reflexions singulieres sur le frequent Usage de la saignée*, Tom. 2. 8vo. à Paris, 1697.
- Celsus (Aur. Corn.) de re Medica sive Medicina, Fol. Venetiis, 1497. *ib.* 4to. Colon. 1613. *ib.* 8vo. Hagenovizæ, 1528.
- cum Commentar. Hierem. Thriveri Brachellii, 8vo. Antwerp. 1539.
- ex editione Almelovenii, 8vo. Amstel. 1687.
- --- Vulpii, & Jo. Bapt. Morgagni epistolis, 8vo. Patav. 1722.
- cum Præfat. Wedellii, 8vo. Jenæ, 1713. *There have been many other Editions of this excellent Author.*
- Chabert *Observations de Chirurgie pratique*, 12mo. à Paris, 1724.
- Chalmetei (Anton.) *Enchiridium Chirurgicum*, 8vo. Paris. 1564. it. 12mo. Lugd. 1588. it. 8vo. Patav. 1593. & Basil. 1620. 8vo.
- Chamberlain's *Practice of Midwifry*, 8vo. Londini, 1665.
- Charleton (Walth.) *Spiritus Gorgonicus, sive de causis, signis & curatione Lithiascos*, Lugd. Bat. 1650.
- Charretani, (Jo.) &c. *His Surgery, extant in a High Dutch Book, intituled, Artzney-buch vor allerley Kranckheiten*, 4to. Erfurt, 1545.
- Charriere (Joseph.) *Traité des Operations de la Chirurgie*, 12mo. à Paris, 1692. & postea, 1706.
- Cheselden (Guil.) *Treatise of the high Operation, &c.* 8vo. cum Fig. Lond. 1723.
- *Anatomy of the human Body*, edit. 3. 8vo. Lond. 1726. & edit. 4to. 1730.
- Idem, Lond. 1740. *In this are many Observations relative to Surgery.*
- Chefne (Jos. du) de la Cure des Arquebusades, 8vo. Lyon. 1576.
- Chevalier *traité sur l'Usage des differens saignées*, 8vo. à Paris, 1730.
- Chicoyneau *Relation de la Peste de Marseille*, 8vo. à Leyden, 1721. avec un discours de la Contagion Pestilentielle, par Rich. Mead.
- Chiffletius (Jo. Jac.) de acia Celsi, 4to. Antwerp. 1633.
- Chirurgici Scriptores optimi a Gesnero editi, nimirum Cauliacus, Brunus, Theodoricus, Rolandus, Lanfrancus, Bertapalia, Rogerius, & Salicetus, Fol. figur. 1555.
- Chirurgici a Petro Uffenbachio editi, qui sunt Pareus, Tagaultius, Hollerius, Sanctus, Bologninus, Blondus, Ferrius, Dondus, Fabricius Hildanus, Fol. Francofurti, 1610.
- Chirurgiæ Compendium, in High Dutch, 12mo. Hamb. 1679.
- Chirurgische Berichten ab zu fassen, in High Dutch, 8vo. Budissin, 1713.
- *Tractatlein 1.) von Augen Kranckheiten, 2.) von Bruchen, 3.) von Erbgrind, 4.) von Zahnen und alten Schaden*, 4. Argentorati, 1538. *All in High Dutch.*
- Chunii (Jo. Phil.) *diff. de Pædarthrocace*, 4to. Marp. 1697.
- Clacius (Georg.) *Practical Observations in Surgery. High Dutch*, 8vo. Hanoveræ, 1718. 1722.
- Clauderii (Christ. Ern.) *Mirabilis calculi humani Historia*, 4. Chemnitii, 1728. c. fig.
- Le Clerc *Chirurgie complete*, Parisiis, 1695. it. 12mo. à la Haye, 1707. postea Paris, 1719. & 1720.
- *L'Appareil commode en faveur des Jeunes Chirurgiens*, cum fig. 8. à Paris, 1700.
- Clowes (Will.) a Book of Observations on Burns with Gunpowder, and Wounds made with Musket-shot; with a Treatise on the Lues Venerea, Lond. 1596.
- Clysmatica nova, in High Dutch, 4to. Kil. 1662. by Jo. Dan. Major.



- Cocchi (Ant.) Epistola ad Morgagnum de lente CrySTALLINA oculi Humani vera suffusionis sede, 8vo. Romæ, 1721.
- Codronchius (Bapt.) de Prolapsu Cartilaginis Mucronatæ, 4to. Bonon. 1603.
- de Hydrophobia & Rabie, 8vo. Amst. 1710.
- Cohaufen (Jo. Henr.) Lúcina Ruyschiana, sive Musculus Uteri Orbicularis Ruyschii ad Medicinæ practicæ Rationalis trutinam revocatus, 8vo. Amst. 1731.
- Colbatch (Jo.) Novum lumen Chirurgicum; *or, a new Light of Surgery*, 8vo. Lond. 1698.
- Works in Physic and Surgery, 8vo.
- Collection of Tracts, Chirurgical and Medical, 8vo. Lond. 1700.
- Colle (Jo.) Elucidarium Anatomicum & Chirurgicum, Fol. Venet. 1621.
- Collectanea Chirurgica anni 1721. & 1722. in *High Dutch*, 8vo. Hanoveræ, 1722.
- Calot (Franc.) Traité de l' Operation de la Taille & des Suppressions d'Urine, cum fig. 8vo. à Paris, 1727.
- Commercium literarium, begun Anno 1731. Norimbergæ, 1731. and continued for some Years. *This contains many Chirurgical Observations.*
- Cooke (Jac.) Marrow of Surgery, Anatomy, and Physic, 8vo. Londini, 1676.
- Corbye (A. de) Les Fleurs des Chirurgie cueilles es Livres des plus excellents Auteurs, qui ayent escrit d'icelle, tant anciens, que Modernes, 8vo. Lugd. 1642. & Paris. 1660.
- Cortesi (Jo. Bapt.) Commentarius in librum Hippocratis de Vulneribus Capitis, 4to. Messanæ, 1632.
- Chirurgia, 4to. ibid. 1633.
- Cortilionis (Sebast.) de Chirurgica Institutione, Lib. 5. 8vo. Francof. 1610.
- Coschwitz (Georg. Dan.) Manuductio ad Chirurgiam, 4to. Halæ, 1722.
- dissert. de Sphacelo fenum, 4to. ibid. 1725.
- de Parturientium Reclinatione supina pro partu facilitando inutili, 4to. Halæ, 1725.
- de Trepanatione, 4to. ibid. 1727.
- de Hypopyo, 4to. ibid. 1728.
- Costæus (Jo.) de igneis Medicinæ præfidiis, 4to. Venet. 1595.
- Courcellius (Franc.) de Sanguinis Missione, 8vo. Francof. 1593.
- Courtial (J. Joseph.) Observations anatomiques sur les Os & sur leurs Maladies, 8vo. Paris, 1705.
- Courtin (Germain) les Oeuvres Anatomiques & Chirurgicales, fol. à Rouen, 1656.
- Coward (Guil.) Ophthalmiatriæ sive Oculorum Medela, 8vo. Lond. 1706.
- Craufii (Rud. Guil.) de Fœtus Mortui ex Utero Extractione, 4to. Jenæ, 1677.
- de Sphacelo, diss. 4to. ibid. 1678.
- -- Strumis, diss. 4to. ibid. 1687.
- -- Ulceribus Uteri, 4to. ibid. 1690.
- -- Hirudinibus, 4to. ibid. 1695.
- -- Scelopetorum vulneribus, 4to. ibid. 1695.
- -- Ulceribus antiquis, 4to. ibid. 1699.
- -- Suffocatorum aqua vel laqueo Restitutione in vitam, 4to. ibid. 1705.
- -- Ranula sub lingua, 4to. ibid. sine anno Impressionis.
- Crellii (Lud. Christ.) Marmorea memoria, G. F. Seligmanni, Saxonnici supremi Concionatoris, qua portentosi Calculi, quæ ipsa fata properarunt, describuntur, cum fig. 4. Lips. 1708.
- Cron (Ludwig.) vom Aderlassen und Zahnaus ziehen, cum fig. 8vo. Lips. 1717. *This is a High Dutch Treatise of Venesection, and Drawing of Teeth.*
- a Cruce (Andr.) Chirurgia Universalis, fol. Venet. 1573. & 1596. *In Italian.* Venet. 1605.
- Cypriani (Abruh.) Oratio encomiastica in Chirurgiam, fol. Franequeræ, 1693.
- Historia Fœtus post 21 Menses ex uteri tuba Matre salva excisi, c. fig. 8vo. Lugd. Bat. 1700.
- dissert. de Carie Ossium, 4to. Ultrajecti, 1680.
- Cystitomia hypogastrica; *or, a Treatise on the high Operation for the Stone*, 4to. Lond. 1724.

## D.

- Dalechamps (Jaque) Chirurgie Françoisse avec plusieurs Figures des Instrumens nécessaires, 8vo. Lyon. 1570.
- Deggeleri (Tobia) diss. de Luxatione Vertebrarum, 4to. Altorf. 1702.
- Doidler (Anton.) de Morbis venereis & Tumoribus, 8vo. Lond. 1724.
- (Antoine) Experiences sur la Bile & les Cadavres des Passiferos, 8vo. à Zurich, 1722.
- Dekkers (Frid.) Exercitationes Practicæ, c. fig. 4to. Lugd. Bat. 1695.
- Depps (Jac.) Observationes de Calculo Renum, Vesicæ, Ure-

- thræ, Lithotomia, & Vesicæ Punctura, c. fig. 8vo. Lugd. Bat. 1731.
- Depré (Jo. Frid.) de Ulcere auris diss. 4to. Erford, 1718.
- Dethardingii (Georg.) de Methodo subveniendi submersis in aqua per Laryngotomiam, Epist. 4to. Rostoch. 1714.
- de Variolarum Inoculatione dissert. 4to. ibid. 1723.
- dissert. An in Cranii depressione elevatio ejus per manum Chirurgicam semper sit necessaria? 4to. ibid. 1732.
- dissertatio de Necessitate inspectionis Vulnerum in Crimine homicidii, 4to. ibid. 1726.
- a Deventer (Henr.) Operationes Chirurgicæ in arte Obstetricandi, 4to. Pars 1. Lugd. Bat. 1701. Pars 2. ibid. 1724. c. fig.
- The same in High Dutch, under the Title of Neves Hebammen Licht. 8vo. Jen. 1717.
- Dibon sur les Maladies veneriennes, 8vo. Paris, 1724.
- Digby (Kenelm) Receipts in Physic and Surgery, 8vo. Lond. 1668.
- discours sur la Guérison des Playes par la Poudre de Sympathie, 12mo. Paris, 1658. id. in High Dutch, 8vo. 1684.
- Dini Chirurgia. Additi sunt Gentilis de Fulgineo & Gentilis de Florentia de Dislocationibus & Fracturis Commentarii, fol. Venetiis, 1536.
- Dionis (Petr.) Cours d' Operations de Chirurgie, 8vo. à Paris, 1707. & 1714. 8vo. Mai.
- Chirurgische Operationes, 8vo. Augsp. 1712. & ibid. 1722. *Corrected and improved by L. Heister.*
- Traité General des Accouchemens, 8vo. Maj. Paris, 1718.
- Doebelli (Jo. Jac.) Historia Penis, Glandes cancrofi ac feliciter resecti, 12mo. Lips. 1693. *The same in High Dutch*, 12mo. Lips. 1699. cum fig.
- Dolæi (Jo.) Opera omnia Medica & Chirurgica, fol. Erf. 1703.
- Dondi (Jac.) Remedia Chirurgica, in Thesaurio Chirurg. Uffenbachii, fol. Frf. 1610.
- Douglas (Jo.) several Treatises on the high Operation for the Stone, and Venereal Disease.
- A short Account of Mortifications, &c. 8vo. Lond. 1732.
- (Jacobi) History of the lateral Operation, 4to. Lond. 1726.
- Appendix to the History of the lateral Operation for the Stone; containing Mr. Cheselden's present Method of performing, 4to. Lond. 1731.
- Drake (Jacob) Anthropologia; *or, a new System of Anatomy, containing some Chirurgical Observations*, 8vo. Lond. 1707. 2 Vol.
- Dran (Henr. Franc. le) Parallele des differentes manières de tirer la Pierre hors de la Vessie, c. fig. 8vo. Paris, 1730.
- Drelincurtius (Car.) de la Pierre, 12mo. à Leide.
- Dubé Medicin & Chirurgien des Pauvres, 8vo. Rouen, 1712.
- Dubon (Claude) idée des Principes de la Chirurgie, contenant les differents Tumeurs, Plaies, Ulceres, Fractures & Luxations des Os, &c. 8vo. à Dresde, 1734.
- Duni (Thaddæi) de Venæsectione, 8vo. figur. 1557.

## E.

- Eckhardi unvorsichtige Hebamme; *that is, The imprudent Midwife*, 8vo. Lips. 1715.
- verwegener Chirurgus; *that is, The rash Surgeon*, 8vo. Augustæ Vindel. & Lipsiæ, 1698.
- Eggerdesii (Aland. Maur.) de Peste, & infallibili eam extirpandi Ratione, ex Latina in Germanicam linguam translata per Jungkenium, 8vo. Franc. 1715. Auctior Uratistaviæ, 1720. 4to.
- Elleri (Jo. Theod.) Medicinische und Chirurgische anmerkungen, 8vo. Berol. 1730. *That is, Medicinal and Chirurgical Observations.*
- Ellholtzii (Jo. Sigism.) Clysmatica nova sive Chirurgia Infusoria & Transfusoria, 8vo. Colon. Brandenb. 1667. edit. 2. c. fig. Idem, 4to. Francof. 1668.
- Steatomatis resecti & feliciter sanati Historia, 4to. Colonie Brandenburgicæ, 1666.
- Enchiridium Chirurgicum, 8vo. Patav. 1593.
- Ephemerides, Miscellanea & Acta Acad. nat. curiosor. variis annis & locis edita. *These are interspersed with many Chirurgical Observations.*
- Erasistræus, sive de Sanguinis missione, autore Luca Antonio Portio, Med. Romano, 12mo. Romæ, 1682. & Venet. 1683.
- der Erfahrene Chirurgus. In High Dutch, 8vo. Hamb. 1698. *The expert Surgeon.*
- Erndelii (C. H.) Iter Anglicanum & Batavum, 8vo. Amst. 1711.
- Ettmulleri (Mich.) Opera omnia, fol. Francof. ad Moen. 1696. Vol. 1. & 1697. Vol. 2.

Ettmulleri



- Ettmulleri Operum Compendium, 8vo. Amst. 1702.  
 — Chirurgiæ, 12mo. Amst. 1691.  
 — diff. de Viperæ morfu, 4to. Lips. 1666.  
 — Chirurgia Infusoria, 4to. ibid. 1668.  
 — Transfusoria, 4to. ibid. 1682.  
 — diff. de Sarcocele, 4to. ibid. 1723.  
 — de Vulneribus Diaphragmatis, 4to. ibid. 1730.  
 — Ventriculi, 4to. ibid. 1730.  
 — prægrandi Pedis Inflammatione, 4to. ibid. 1730.  
 Eyselii (Jo. Philipp.) Compendium Chirurgicum, 8vo. Erford, 1714.  
 — differt. de vulnere Ventriculi duplicato non Lethali, 4to. ibid. 1725.  
 Eysenbarthi (Jo. Mich.) de Optima Lithotomiam administrandi Ratione, 4to. Halæ, 1713.

## F.

- Fabri (Petr. Jo.) Chirurgia Spagyrica, &c. 8vo. Argentor. 1632. & Tolosæ, 1638.  
 Fabricius (Guil.) Hildanus, de Gangræna & Sphacelo, cum Obf. 8vo. 1598.  
 — de Combustionibus, 8vo. Basil, 1607.  
 — Observationum Centuria, fol. Francof. 1610.  
 — de partu Cæsareo, & vulnere Sclopeti, Oppenheimii, 1614.  
 — Neu Feld-Artzneybuch und Chirurgischer, Reiskasten, 8vo. Basil, 1615.  
 — On Lithotomy, in High Dutch, 8vo. Basil, 1626. & Latine, ibid. 1628.  
 — Cista militaris, 8vo. ibid. 1633.  
 — Observationum Centuriæ V. 4to. Basil, 1606. & Lugd. 1641. cum Epistola de partu Cæsareo.  
 — de vulnere Sclopeti, & monstro Laufannæ nato, 8vo. Oppenheim, 1614.  
 — non dem Halsgeschwulst, und der Bräune, 8vo. Stutg. 1661. *That is, Of a Quinsy.*  
 — Opera Omnia, in High Dutch, Fol. ibid. 1652.  
 — Observationes & Epistolæ, ex Jo. Sigism. Henningeri editione, 4to. Pars I. Argent. 1713. p. 11. ibid. 1716.  
 Fabricii (Hieron.) ab Aquapendente, Pentateuchus Chirurgicus cum marginalibus & Præfat. Beyer, 8vo. Francof. 1582.  
 — Opera Chirurgica in duas partes divisa, 8vo. Francof. 1620. in Fol. Venet. 1619. *The same in Dutch*, 1647. & 1666. in Fol. *The same in High Dutch*, 4to. Norimb. 1716.  
 — Oeuvres Chirurgicales de Fabrice d'Aquapendente, 8vo. Rouen, 1658.  
 Falcon (Jean.) Remarques sur la Chirurgie de M. Guy de Chauliac. 8vo. à Lyon. 1649.  
 Falconeti (Camilli) Quæstio Medico-chirurgica, An educendo Calculo, cæteris anteferendus apparatus lateralis? 4to. Paris, 1730.  
 Fallopius (Gabr.) de Ulceribus & Tumoribus, 4to. Venet. 1563.  
 — Comment. in Hippocratem de Vulneribus Capitis, 4to. ibid. 1566.  
 — Opera omnia, Fol. Francof. 1606. & Fol. Venet. 1606.  
 — Chirurgia, 4to. ibid. 1637.  
 Faschii (Aug. Hen.) de Vesicatoriis diff. 4to. 1673.  
 — de Medicina profetica, 4to. ibid. 1677.  
 — Anthrace pestilentiali, 4to. ibid. 1681.  
 — Parotidibus, Jenæ, 1683.  
 Fauchard. (Pierre) Chirurgien dentiste, cum fig. 2 Tomes, 8vo. Paris, 1728. *In High Dutch*, 8vo. Berlin. 1733.  
 Fehrii (Jo. Henr.) diff. de Calculo vesicæ, ejusque per sectionem auferendi Methodo, 4to. Basil. 1716.  
 Feltman (Gerh.) lib. de Cadavere inspiciendo, 4to. Bremæ, 1692.  
 Ferrara (M. Camillo) Nova Selva di Chirurgia, 8vo. in Venetia, 1596.  
 Ferraræ (Gabr.) Sylva Chirurgiæ, 8vo. Francof. 1625.  
 Ferrius (Alfonfus) de Sclopetorum vulneribus, 4to. Romæ, 1552. & Lugd. 1553. cum libro de Caruncula in Urethra. Item, 8vo. Venet. cum Botallo, Maggio & Rota. 1566. Item, 4to. Francof. 1575. deinde Fol. Francof. 1610.  
 Ficklii (Jo. Jac.) de Abdominis Abscessu diff. 4. Jenæ, 1714.  
 — de Clysteribus nutrientibus & frigidis, 4to. ibid. 1718.  
 Fidelis (Fortunat.) de Relationibus Medicorum, 8vo. Lips. 1664.  
 Fienus (Thom.) de Cauteris libri V. 8vo. Lovan. 1598.  
 — libri Chirurgici XII. de præcipuis artis Chirurgicæ Controversiis cura H. Conringii edit. 4to. Francof. 1649. 4to. Lond. 1733.  
 Fierabras. la vraie Methode de la parfaite Chirurgie, 8vo. Paris, 1648.

- Filgi (Guil. Lud.) de variis Lithotomiam administrandi rationibus, & præsertim Ravianæ præstantia, 4to. Gieslæ, 1727.  
 Fioraventi Leonh. Cirurgia, in Italian, 8vo. Venet. 1588. & 1679.  
 Fischéri (Jo. And.) diff. de Oculi tumore Scirrroso extirpato, 4to. Erford. 1720.  
 — de veneno Canis Rabidi, 4to. ibid. 1725.  
 — de variolarum Infectione, 4to. ibid. 1726.  
 — de Scroti Sphacelo curato, 4to. ibid. 1729.  
 a Fonseca (Roder.) de Calculorum Remediis, 4to. Romæ, 1586.  
 Fontani (Car.) diff. de Hydrope & Tympanite, 8vo. Genevæ, 1697.  
 — (Jac.) Opera, 4to. ibid. 1613.  
 — (Nic.) Aphorismi Hippocratis, quibus accedit tractat. de extractione Fœtus mortui per uncum, 12mo. Amstel. 1633.  
 — Florilegium medicum: non solum Medicis, verum Chirurgis apprime jucundum & necessarium, 12mo. ibid. 1637.  
 — Commentarius in Sebast. Austrum de puerorum Morbis, ubi Capite de angina Laryngotomiam describit, cum fig. 12. Amstel. 1642.  
 Foresti (Petri) Observationes & Curationes Chirurgicæ, 8vo. Antverp. 1610.  
 — Opera omnia, Fol. Francof. 1602. & 1634. item, Fol. Norimb. 1660.  
 Formy (Sam.) Chirurgien de Montpellier. Traité Chirurgical des Bandes laqs, Emplastres, Compressees, Atelles & des Bandages, 8vo. à Montpellier, 1653.  
 Fragafo (Gio.) Cirurgia, translated from Spanish into Italian, by Balthaf. Grassi, 4to. Venet. 1686.  
 Frambesarii (Nic. Abrah.) Opera canones medicos & chirurgicos continentia, 4to. Francof. 1629.  
 Framboisiere, œuvres, ou sont decrites l'Histoire du Monde la Medicine, la Chirurgie, & la Pharmacie, Fol. Lyon. 1669.  
 Franchimont. (Nic. a Franckenfeldt) de Calculo Renum & Vesicæ, 8vo. Prag. 1683.  
 Franci (Georg.) diff. de Labiis Leporinis, 4to. Heidelbergæ, 1686.  
 Francisci (Jo. de Franc.) Libellus aureus de Venæsectione contra Empiricos, 12mo. Neapoli, 1645. & 8vo. Francof. 1685.  
 Franco (Pierre) Traité des Hernies, de la Pierre, Cataractes, & autres excellentes parties de la Chirurgie, 8vo. Lyon. 1561.  
 Francus (Jo.) *A Treatise of Setons. In High Dutch*, 12mo. Aug. Vind. 1683.  
 Freitagii (Jo. Henr.) diff. de Cataracta, 4to. Argentorat. 1721.  
 — de Oscheo-entero & Bubonocoele, 4to. ibid. 1721.  
 Fritschii (Jo. Chr.) Theologische, Juristische, Medicinische, und Physicalische Geschichte, 4to. Iom. V. Lipsiæ, 1730. & 1734.

## G

- Gailhardi (Jo.) de Venæsectione disquisitio, 12mo. Hafn. 1699.  
 Gakenholzii (Alex. Christ.) Diff. de Visu per Cataractam impedito, 4to. Helmstad. 1713.  
 Galeni (Claud.) Opera omnia. See GALENUS.  
 Galvonus (Dominic.) *Of Issues. In Italian*, 4to. Padua, 1620.  
 Garengot (Jacques Croissant.) Traité des Operations de Chirurgie, II. Tomes, 8vo. Paris, 1720. Editio II. ibid. 1731. III. Tomes.  
 — Traité des Instrumens de Chirurgie, II. Vol. 8vo. Paris, 1723. Editio II. ibid. 1727.  
 Gavassietius (Mich.) de Cauteris, 4to. Venet. 1587.  
 Gaukes (Yvonis) Praxis medico-chirurgica rationalis, 4to. Groning. 1700. ib. 8vo. Amst. 1708. *in High Dutch*, 8vo. Dresdæ, 1709.  
 a Gehema (Jani Abrah.) Die Eroberte Gicht durch die Chirurgische Waffen der Moxa, 12mo. Hamb. 1682. *That is, The Cure of the Gout, by Moxa.*  
 — Graufame Medicinische Mord-mittel, Aderlassen, purgieren, &c. 8vo. Bremæ, 1688.  
 — der Vohlversehene Feld-medicus, 12mo. Hamb. 1684. *That is, The Camp Physician and Surgeon.*  
 — Observationum Chirurgicarum decas, 1. & 2. 12mo. Hamb. 1686.  
 — Observationes Chirurgicæ, 12mo. Francof. 1690.  
 — Tractatus de Placu Polonica, 12mo. Hamb. 1683.  
 — Krancker Soldat, 12mo. 1690. *That is, The Sick Soldier.*  
 Geigeri (Malach.) Kelegraphia sive Descriptio Herniarum, cum fig. 8vo. Monach. 1631. *The same in High Dutch*, 12mo. Ulmæ, 1696.

Geilfufii



- Geilfusii (Bern. Wilh.) Diff. de Moxa, 4to. Marburg, 1676.
- Gelmanni (Georg.) *Surgery. In High Dutch*, 4to. Francof. 1652.
- Gemma (Jo. Bapt.) vera Methodus Curandi Bubonem & Carbunculum pestilentialem, 4to. Græcii Stiria, 1584. It. 4to. Dantisci, 1699. It. 4to. Venet. 1602.
- Gendron (Deshaies) Recherches sur la Nature & la Guérison des Cancres, 8vo. Paris, 1701.
- Genga (Bernh.) Anatomia Chirurgica, 8vo. Rom. 1686.
- Commentaria in Aphorismos Hippocratis Chirurgicos, 8vo. ibid. 1694.
- Georgii (Matth.) Phlebotomia Liberata, seu Apologia pro sanguinis missione contra Dominic. Scalam, 4to. Genuæ, 1697.
- Gerstorff (Hans von.) Feldbuch der wundartzney, 4to. Argentor. 1527. *That is, The Camp Surgeon.*
- *Surgery, in High Dutch, with Figures*, Fol. Straßb. 1542.
- hewetrtte wundartzney, 4to. Francof. 1606. *That is, The expert Surgeon.*
- Gesneri (Conr.) Scriptores Optimi de Chirurgia, veteres & recentiores, ut Jo. Tagaultius; Jac. Hollerius; Marianus Sanctus; Angel. Bologninus; Mich. Angelus; Barthol. Maggius; Alfons. Ferrius; Jo. Langius; Claud. Galenus; Oribasius; Jac. Dondus: Fol. Tigur. 1555. cum fig.
- Gherli (Fulvio) Centuria d' observationi rare di Medicina e Chirurgia, 12mo. Venet. 1719.
- Gibb's Observations of scrophulous Distempers call'd the King's-evil, 8vo. Lond. 1712.
- Gladbachii (Carl. Frid.) dissertatiuncula de Fistula Ani, 8vo. Hanov. 1721.
- (Cornel.) quod instrumenta in partu, p. n. nonnisi summa necessitate sint adhibenda, diss. 4to. Lugd. Bat. 1732.
- (Jo. Adolph.) diss. de Hernia incarcerata suppurata non semper Lethali, 4to. Helmstad. 1738. cum fig.
- Glandorpil (Matth.) Speculum Chirurgorum, de vulneribus tractans, 8vo. Bremæ, 1619.
- Methodus Medendæ Paronychiæ, 8vo. ibid. 1623.
- de Polypo Narium, 4to. ibid. 1628.
- Gazophylacium polyplusium Fonticulorum & Setaeorum, 4to. ibid. 1633.
- Opera omnia, 4to. Londini, 1729.
- Gockelii, (Jo. Christoph.) &c. *Medicinal Surgery, in High Dutch*, 8vo. Ulmæ, 1704.
- Goelicke (Andr. Ottomar.) Historia Chirurgiæ antiqua & Recentior, 8vo. Halæ, 1713.
- Diss. de Uteri Prociditiam curandi Artificio novo, 4to. Halæ, 1710.
- Diss. de mutilo Medicinæ Corpore per Chirurgiam & Pharmaciam restituendo, 4to. Halæ, 1711.
- de Trichosi, 4to. Francof. ad Viadr. 1724.
- Dyslocia, 4to. ibid. 1732.
- Tendinum Affectionibus, 4to. ibid. 1732.
- Ileo ex Hernia, 4to. ibid. 1735.
- Chirurgiæ cum Medicina Conjunctione, 4to. ibid. 1735.
- Medicina Forensis, 4to. Esurt. ad Viadr. 1723.
- Gohlil (Jo. Dan.) *A Compendium of Surgery, in High Dutch*, 8vo. Norimb. 1736.
- de Spina Ventosa dissert. 4to. Halæ, 1727.
- Gorrei (Jo.) Opuscula de Venæsectione, &c. 4to. Paris, 1660.
- Govey (Louis Leger. de) la Veritable Chirurgie, 8vo. à Rouen, 1716.
- Gormelini (Steph.) Synopsis Chirurgiæ, 8vo. Lutet. 1566.
- Gourmelin (Estienne) Oeuvres Chirurgicales, 8vo. à Paris, 1647.
- Greiffens (Sebast.) *Surgery, in High Dutch, Wundartzney*, 12mo. Schleusingæ, 1630.
- Grimberg. (Nic.) Von Nieren und Blasen-stein, 8vo. Hafniæ, 1695. *That is, Of the Stone in the Kidneys and Bladder.*
- Groenevelt (Jo.) dissertatio Lithologica, cum fig. 8vo. Lond. 1687.
- Treatise of the Stone and Gravel, cum fig. 8vo. Lond. 1710.
- Grublmann (Jo. Gottfr.) never Anatomisch-chirurgischer tractat von einrichtung, und Zusammenfügung der Verrenckungen, 8vo. Lips. 1706. *That is, Of Luxations, &c.*
- Gruling. (Philipp.) de Triplici evacuationis Universalis genere, Venæsectione, Scarificatione, Hirudinibus, &c. 4to. Francof. 1670.
- Guillomeau (Jac.) Oeuvres de Chirurgie cum fig. Fol. Paris, 1612. Item, à Rouen, 1649.
- de la Grosseffe & Accouchement des Femmes, cum fig. 8vo. à Paris, 1643.
- Augen und Zahn-Artz, 8vo. Dresden, 1710.
- *That is, Of the Diseases of the Eyes and Teeth.*

Guyard de la frequente Saignée dans les Fievres, second. edit. 8vo. à Paris, 1710.

## H

- Hænelii (Christ. Frid.) diss. de Morbis Scroti, 4to. Argent. 1723.
- Hammen (Ludov.) de Herniis, cum Epistolis de Crocodilo ac Vesicæ Mendaci Calculo, 12mo. Lugd. Bat. 1681.
- Hampe (Jo. Henr.) de Oculorum Scarificatione Hippocratica diss. 4to. Duisburgi, 1721.
- Hancke (Dan. Abrah.) Ob in den warmen oder Kalten Landern ofter ader zu lassen. *In High Dutch*, 8vo. Francof. 1734. *That is, Whether it is proper to bleed or purge most frequently in hot or in cold Climates.*
- Harris (Gualter.) diss. Medicæ & Chirurgicæ, 8vo. Lond. 1725.
- Hartranfti (Jo. Valent.) diss. de non differenda Secundinarum adhærentium extractione, 4to. Lips. 1735.
- Hecquet sur la saignée du pied & Purgation, au commencement de la petite Verole & des Fievres malignes, avec de Raifon contre l' Inoculation de la petite Verole, 8vo. Paris, 1724.
- Heisteri (Laur.) de Cataracta in lente CrySTALLINA, Dissertationes tres, 4to. Altorfii, 1711. & 1712.
- de Cataracta, Glaucomate, & Amaurosi tractatio, 8vo. Altorf. 1713 & 1720. Apologia pro hoc libro, imprimis contra Wolhusium, 8vo. ibid. 1717. Vindiciæ hujus libri, 8vo. ibid. 1719.
- de Gastro & Enteroraphe, 4to. ibid. 1713.
- Chirurgiæ novæ adumbratio, 4to. ibid. 1714.
- de nova Methodo sanandi fistulas Lacrymales, 4to. Altorf. 1716.
- *Surgery, in High Dutch*, 4to. Norimb. 1718. 1724. 1731.
- *In Latin*, Amstælodami, 1739.
- diss. de superfluis & noxiis quibusdam in Chirurgia, 4to. Altorff. 1719.
- de Fœtu ex Utero Matris mortuæ mature excidendo, 4to. ibid. 1720.
- de optima Cancrum Mammarum extirpandi ratione, diss. 4to. ibid. 1720.
- de Trichiosi Oculorum, 4to. Helmstad. 1722.
- de Anatomies subtilioris utilitate, (præsertim in Chirurgia) dissertatio, 4to. ibid. 1728.
- de Chirurgorum erroribus in curandis Morbis Venereis, 4to. ibid. 1728.
- de Kelotomiæ abusu tollendo, diss. 4to. ibid. 1728.
- Alto Adparatu, 4to. ibid. 1728.
- Observationes Medicæ Miscellaneæ, 4to. ibid. 1730.
- de Chirurgia cum Medicina necessario conjungenda, 4to. ibid. 1732.
- de Fallaci Pulmonis infantum Experimento, 4to. ibid. 1732.
- de Medico (aut Chirurgo) nimis timido, 4to. ibid. 1733.
- Anatomies majori in Chirurgia quam Medicina necessitate, 4to. ibid. 1737.
- Hernia Incarcerata suppurata non semper Lethali, 4to. ibid. 1738.
- (Eliæ Frid.) diss. de Nova Methodo Amputandi Brachium, 4to. Helmstad. 1738.
- Dissert. de cura Principum circa Sanitatem subditorum, 4to. ibid. 1738.
- Hellmontii (Jo. Bapt.) Opera, 4to. Amst. 1652.
- Helvetius Traité de pertes de Sang, & du Cancer, 8vo. Paris, 1706.
- Hellwig. (Christoph.) &c. *A Compendium of Surgery*, 8vo. Mühlhausen, 1709. *In High Dutch.*
- Cases and Observations, &c. 8vo. Francof. 1711. *In High Dutch.*
- Haus's Medicus und Land Barbier, 8 Lips. 1719. *That is, The Family Surgeon and Physician.*
- The Clinical Physician, in which is contained the Military Chest, and a Chirurgical Lexicon. *In High Dutch.* 8vo. ibid. 1722.
- Henningeri (Jo. Sigism.) Observationes & Epistolæ Fabric. Hildani in Compend. & Ordinem Redactæ, Argentor. 1713.
- de Paracentesi Abdominis, 4to. Argent. 1710.
- Henslingii (Jo. Thom.) de Ulcere Cacoethica, diss. 4to. Giellæ, 1725.
- Herlf. (Cornel.) &c. *Examen of Surgery, in High Dutch*, 8vo. Amst. 1672. *In High Dutch intituled Wund-artzney*, 12mo. Norimb. 1676.
- Heucheri (Jo. Henr.) diss. de Chirurgo Infante, 4to. Vitebergæ, 1710.
- Heurnius (Jo.) De Morbis Oculorum, Aurium, Nasi, Dentium, &c. 4to. Antverp. 1608.
- Heyne (Jo. Christoph.) de Præcipuis Quibus Morbis, cum fig. 8vo. Amstel. 1705.



- Hierovii (Barthol.) *Methodus Chirurgica*, 8vo. Francof. 1595.  
 Hildanus. See Fabricius.  
 Hilfcheri (Sim. Paul.) *differt. de Cruris Fractura cum Vulnere*, 4to. Jenæ, 1710.  
 — de Urinæ Incontinentia ex partu Globulis ligneis curanda, 4to. ibid. 1716.  
 — Amputatione artuum, rite administranda, 4to. ibid. 1718.  
 — Aneurismata, 4to. ibid. 1728.  
 — Fonticulis, 4to. ibid. 1729.  
 — Uteri Procidentia, 4to. ibid. 1730.  
 — Paronychia, 4to. ibid. 1736.  
 Hippocrates. See the Article of his Name.  
 Histoire de l'Académie Royale des Sciences.  
 Historia Academiæ Regiæ Scientiarum, autore Jo. Bapt. du Hamel, 4to. Parisiis, 1701. Editio 2.  
 Hoffmanni (Dan.) *Historia Sanationis Cerebri quassati, cum deperditione substantiæ notabili*, 4to. Tubing. 1719.  
 — (Frid.) *de Amputatione Membrorum Sphacelatorum*, *diff.* 4to. Halæ, 1696.  
 — de Fistularum nova sanatione, *differt.* 4to. ibid. 1697.  
 — Ifchaemis *differt.* 4to. ibid. 1698.  
 — *diff.* de Membris Fractis, 4to. ibid. 1700.  
 — de Luxationibus in Genere, 4to. ibid. 1703.  
 — Specie, 4to. ibid. 1704.  
 — Sphacelo ex Causâ interna, 4to. ibid. 1717.  
 — Incontinentia Urinæ ex partu difficili, 4to. ibid. 1724.  
 — Vesicatoriorum Ufu, 4to. ibid. 1727.  
 — Cataracta *differt.* 4to. ibid. 1729.  
 — Uteri Hæmorrhagia, 4to. ibid. 1730.  
 — Fistula Maxillari, 4to. ibid. 1735.  
 — Consultationes & Responsa Medicinalia, 4to. Halæ, 1734. Tom. 2.  
 — (Jo. Maur.) *differt. de Hydrocephalo*, Altorfii, 1695.  
 — (Mauric.) *diff.* de Uteri Procidentia, 4to. ibid. 1695.  
 Holder, (Jul.) *Beschreibung eines wahrhaften Wund-artzens*, 8vo. Lips. 1672. alias ibid. 1630. & 1692. 4to.  
 Hollerius (Jac.) *de Materia Chirurgica*, fol. Paris. 1544. 1552. & 1610. idem, 12mo. Francof. 1589.  
 — *Chirurgia di Tagaultio & Hollerio*, 8vo. Venet. 1596.  
 — de Morbis internis, Febris, Peste, & de Remediis Chirurgicis, 12mo. Francof. 1603.  
 Hombergii (Andr.) *Diff. de Tentigine, S. Clitoridis Excrecentia nimia*, 4to. Jenæ, 1671.  
 — de Fracturis Cranii *diff.* 4to. Basil. 1715.  
 Hoppii (Elizæ) *de Palpebrarum Affectibus*, *diff.* 4to. Basil. 1715.  
 Horlacheri (Conr.) *Of the Cure of a Cancer, Scrofula, and Polypus*, in High Dutch, 8vo. Ulmæ, 1697.  
 — *Chirurgus Extemporaneus*, 8vo. Frf. 1701.  
 — Manier Bruche ohne schneiden zu Curiren, 8vo. Ulmæ, 1695. *That is, The Method of curing Hernias without cutting.*  
 Horne (Jo. Von.) *Microtechnæ & Microcosmos*, 12mo. Lugd. Bat. 1662. 1663. & 1675.  
 Hoorn (Jo. Von.) *Succi Ars Obstetricandi. Art of Midwifry*, in Swedish, with Figures, 8vo. Stockholm. 1697. 1719.  
 — Wehmutter, 8vo. ibid. 1726.  
 Homburgen (Anna Elis.) *Unterricht der Hebammen*, 8vo. Hanover. 1700. *That is, Instruction of Midwives.*  
 Hornungi (Jo.) *Chirurgischer Unterricht, wie man allerley Brandchaden curiren soll*, 8vo. Norim. 1682. *That is, The Method of curing Burns.*  
 Horstii (Jo. Dan.) *Judicium de Chirurgia Infusoria*, 12mo. Francof. 1665.  
 Houston (Robert) *Of Ruptures*, 8vo. Lond. 1726.  
 Huberi (Rudolph.) *diff.* de Tumore Scrophuloso Maxillæ Inferioris, a retropulsa Gonorrhœa, 4to. Basil. 1713.  
 Hubner (Jo. Chr.) vom Stein im menschlichen Leibe, 4to. Halle, 1726. *That is, On the Stone.*  
 Hutter (Andr.) *Fifty Chirurgial Observations. In High Dutch*, 8vo. Rostock, 1718. *Fifty more Chirurgial, &c.* 8vo. ibid. 1720.  
 Huxholzii (Wolrad.) *Unterricht vor Hebammen*, Germanice, 8vo. Cassell. 1652. *That is, Instruction for Midwives.*

## I.

- Jehringius (Jo.) *de Calculo*, 4to. Jenæ, 1664.  
 Jessenii a Jessen (Jo.) *Chirurgical Institutions*, in High Dutch, 8vo. Vetebergæ, 1601. & 4to. Norimbergæ, 1674.  
 Ingrassias (Jo. Phil.) *de Tumoribus*, fol. Neapol. 1553.  
 Joël (Franc.) *Surgery*, in High Dutch, 8vo. Norimb. 1680.  
 — Opera omnia, 4to. Amst. 1663.  
 Vol. II.

- Jondot (Philibert.) *Nachricht vom Aderlassen*, 8vo. Ratisbonæ, 1710. *Instructions for Bleeding.*  
 Juncken (Jo. Helfr.) *Surgery*, in High Dutch, 8vo. Francof. 1691. Norimb. 1700. & 1718.  
 Junckeri (Jo.) *Conspectus Chirurgiæ*, 4to. Halæ, 1721.  
 — de Fistula Thoracis, *diff.* 4to. ibid. 1730.

## K.

- Kaltschmid (Carol. Frid.) *diff.* de Hepatis vulnere, 4to. Jenæ, 1735.  
 — defensio hujus dissertationis, cum disquisitione in lethali-tatem vulnerum Hepatis, 4to. Cahlae, 1736.  
 Kapfferi (Matth.) *The Case of a Girl who swallow'd a Knife, which was taken out of her Side near twelve Months after.* In High Dutch, 4to. Wolfenbittelæ, 1563.  
 Keckii (Egid. Craton.) *diff.* de ectropio, sub præsidio J. Zelleri, 4to. Tubingæ, 1733.  
 Keil (Chr. Henr.) *Chirurgisches Handbuchlein*, 8vo. Lips. & Hof, 1730.  
 Kelderman (Cornel.) *Onderwys voor alle Uroed-Vrouwen, rakende hun Ampt ende Plicht*, 8vo. Brugge in Flandria, 1699. *That is, The Duty of a Midwife.*  
 Kennedy, (Peter) *Ophthalmographia; with an Appendix concerning Diseases of the Ears*, 8vo. Lond. 1713.  
 — An Essay on external Remedies, 8vo. Lond. 1715.  
 Kent (Countess of) *Secrets in Physic and Surgery*, 12mo. Lond. 1659.  
 Kirchmaier (Jo.) *diff.* de Sympathetici Pulveris vanitate, 4to. Vitebergæ, 1672.  
 Kisneri (Jo. Ge.) *diff.* de lassionibus Tendinum, 4to. Lugd. Bat.  
 Klauigii (Godofr.) *Nosocomium Charitatis, five Observationes Medicæ & Chirurgicæ, c. fig.* 4to. Uratiss. 1718.  
 Kneufelii (Chr. Frid.) *de Hæmorrhagia Uteri*, 4to. Giesæ, 1698.  
 Koch (Dan.) *diff.* de Hernia Crurali, 4to. Heidelberg. 1726.  
 Koenerding (Adrian.) *Of a Gangrene and Sphacelus*, in Dutch, with Figures, Amst. 1698.  
 Krautermanni (Valent.) *Medicina Renunciatoria & Consultatoria*, 8vo. Arnstad. 1726.  
 Kruger (Barthold.) *Historia Calculorum Macrocosmi & Microcosmi per analogismum*, 4to. Brunopoli, 1714.  
 Krugii (Theodor. Christoph.) *Observationum curiosarum Triga*, 4to. Norimb. 1692.  
 Kuchleri (Jo. Casp.) *diff.* de Ulceribus dentium fistulosis, 4to. Lips. 1733.  
 Kulmi (Jo. Adam.) *diff.* de Claviculæ exosossi Scatometode, ejusque felici Sectione, 4to. Gedani, 1732.  
 — de Uteri Prolapsu, mortis Causa, 4to. ibid. 1732.  
 Kupferschmidt (Jo.) *de Morbis Præliantium, quos in victoriosa Bernatum expeditione Bellica, 1712. observare licuit*, 4to. Basil. 1715.

## L.

- Lambrecht (Amos.) *A Treatise of Midwifry*, in Dutch, 8vo. Amst. 1731.  
 Lamzwerde (Jo. Bapt.) notæ in Sculteti Armamentarium Chirurgicum, 8vo. primo Amst. 1672. & dein iterum auctum atque emendatum a Jo. Tillingio, 8vo. Lugd. Bat. 1693. c. figuris quamplurimis.  
 Lanfranci *Chirurgia. In a Collection of Chirurgical Authors; together with Guido de Cauliacco, and others*, fol. Venetiis, 1546.  
 — Wundartzney, 8vo. Francof. 1566. *That is, Surgery.*  
 Langii (Jo.) *Themata aliquot Chirurgica, in Gesner's Collection of Chirurgical Writers*, fol. Tiguri, 1555.  
 — Epistolæ Medicinales, 8vo. Hanov. 1605.  
 — (Christian. Jo.) *Opera medica*, fol. Lips. 1704.  
 Lanzoni (Joseph.) *Animadversiones variæ ad Medicinam, Chirur-giam, & Anatomiam facientes*, 8vo. Ferrariæ, 1688.  
 — de Clysteribus, fol. ibid. 1691.  
 Lapi (Petri Pauli) *Epistola, Italica lingua conscripta, qua ostendere satagit, Cataractam Oculi non semper esse in humore Crystallino*, 4to. in Rimino, 1722.  
 Largelata (Petri de) *Chirurgia*, fol. Venet. 1499.  
 Lavateri (Jo. Rud.) *diff.* de Atritæis & Hypospadiis, 4to. Traject. ad Rh. 1708.  
 Laugier (Jean François) *Traité des Remedies Vulneraires*, 8vo. à Paris, 1693.  
 Launay (Charles Denis) *sur les Maladies veneriennes & la Mercure*, ibid. 1698.  
 — dissertation de la Pierre, ibid. 1701.  
 Lauremberg (Guil.) *de Curatione Calculi*, 12mo. Lugd. Bat. 1619.  
 Lazerne (Jac.) *Specimen Medico-chirurgicum de suppurationis eventibus*, 8vo. Monspelli, 1724.  
 Leauson, *Chirurgical Operations in High Dutch*, 8vo. Dresdæ, 1709.



- Lechellii (Jo.) Theorema sine tutum & conveniens in Capitis imique ventris contusionibus Pharmaca per Inferiora purgantia usurpare necne. 4to. Guelferbyti, 1668.
- Leporius, (Christian Polycarp) A Treatise shewing, that the Expulsion of the Secundines are not to be left to Nature, contrary to the Opinion of Ruysch, 4to. Lipsiæ, 1728. *In High Dutch.*
- Lequin. traité des Hernies, ou Décentes, cum fig. 8vo. à Paris, 1690. *and in* 1684.
- Lichtmann (Jo. Mich.) *Of a Cataract, in High Dutch*, vom Staar, 4to. Norimb. 1720.
- Listeri (Mart.) A Journey to *Paris* in the Year 1698. 8vo. Lond. 1699. Containing many Things relative to Surgery.
- Loeberi (Enst. Chr.) Contusionum Historia, 4to. Jenæ, 1726.
- Loescheri (Mart. Gotth.) Observationes Medicæ & Chirurg. 4to. Viteb. 1723.
- diff. de Herniarum Curatione, 4to. ibid. 1725.
- diff. de Uteri Procidencia, 4to. ibid. 1728.
- Loew (Jo. Franc.) Theatrum Medico-juridicum, 4to. Norimberg. 1725.
- Lonicérus (Adam.) *A Treatise of Midwifry, in High Dutch*, 4to. Francof. ad Moen. 1573. & 1703.
- Löfén (Laur.) Pell-barbier, 12mo. Meinungæ, 1682. *That is, The Plague-surgeon.*
- Lowéri (Rich.) Tract. de Corde. *In this there is a Treatise on the Transfusion of Blood; and some Remarks on Phlebotomy*, London, 8vo. 1669. & 8vo. Lugd. Bat. edit. quinta, 1708.
- Lupi (Jac. Ant.) Chirurgia inforzata, 8vo. Venet. 1721.
- fuellata, 8vo. ibid. 1716.
- Lysihenii (Gottl. Wipert.) diff. de Aneurysmate, 4to. Halæ, 1725.
- M.
- Magatus (Cæsar.) de rara Medicatione Vulnerum, fol. Venetiæ, primo 1615. postea ibid. 1676. & 1733.
- Maggius (Barthol.) de Vulnerum Sclopetorum & Bombardarum curatione, 8vo. Bonon. 1552.
- de Vulneribus Sclopetorum, fol. *in Gesner's Collection*, Figur. 1555.
- Magdi (Pietro Paulo) sopra il modo di Sanguinare, attacar le sanguisughe & le Veitose, sur le Fregagioni & Vescicatorii, 4to. Romæ, 1613. & postea 1626. & 1674.
- de Cauteriis, Romæ, 1588.
- Majors (Jo. Dan.) Prodrömius Chirurgiæ Infusoriæ, 8vo. Lips. 1664.
- Ortus & Progressus Clysmaticæ novæ, 4to. Kilizæ, 1667.
- Chirurgia Infusoria, 4to. ibid. 1667.
- Maitre-Jean (Antoine) Traité des Maladies de l'Oeil, 4to. à Troyes, 1707.
- *The same in Dutch, with Additions*, by J. Palfin, 4to. Leiden, 1714. c. fig.
- *The same in High Dutch*, 4to. Norimbergæ, 1725.
- Malphus (Viberius) *Surgery, in High Dutch*, ibid. 1676.
- Mangeti (Jo. Jac.) Bibliotheca Chirurgica, qua omnes humani Corporis Affectiones, manum Chirurgi exposcentes, Ordine Alphabetico explicantur, Tomi IV. fol. cum figuris, Genevæ, 1721.
- notæ in Opera Medica & Chirurgica Pauli Barbetti, 4to. Genevæ, 1688.
- Mannus (Jo. Jac.) de Malleolorum Scarificatione ex veterum Sententia, 4to. Patav. 1583.
- Mappus (Marc.) de Fistula Genæ Terminata ad dentem cariosum, 4to. Argentor. 1675.
- Marchie (Madame de la) Instruction familiere & utile aux sages femmes pour bien pratiquer les Accouchemens, 8vo. à Paris, 1710.
- Marchettis (Petri de) Observatio & Curatio Chirurgica nova, cum fig. edita a Jacobo Martini Germano, D. 4to. Patav. 1654.
- Observationes Medico-chirurgicæ, 8vo. ibid. 1664. & 1675.
- Marescotti (Franc.) *Relation of an extraordinary Operation on a Cancer of the Tongue, in Italian, with Figures*, 4to. Bononiæ, 1730.
- Marini (Girolami) *The Practice of Surgical Operations, particularly relating to the Eyes and Lithotomy. In Italian*, 8vo. Romæ, 1723.
- Marquardi (Jo.) Practica Medicinalis cum Cortilionis Chirurgia, 8vo. 1610.
- de Marque (Jac.) Traité des Bandages de la Chirurgie, 8vo. à Paris, 1618. & 1631. cum fig.
- Methodique Introduction à la Chirurgie, 8vo. ibid. 1652. 1662. & 1675.
- Marten (Jo.) Treatise of Venereal Diseases, 8vo. Lond. 1708.
- Martyr (Peter) de Ulceribus & Vulneribus Capitis, 4to. Ticcinii, 1584.

- Mäferi (Theod.) diff. de Obstetricum Erroribus, 4to. Argent. 1726.
- Mafiero (Filippo) Chirurgia Compendiata, 8vo. Venet. 1702.
- Opere Chirurgiche cum fig. 4to. Patav. 1724.
- *Practical Surgery, in Italian*, 8vo. Venet. 1702.
- Massa (Nic.) de Morbo Gallico, ligno Guajaco, &c. 4to. ibid. 1563.
- de Venæsectione, 4to. ibid. 1568.
- Massaria (Alex.) de Scopis Mittendi Sanguinem, 4to. Lugd. 1622.
- Opera Medica, fol. ibid. 1634.
- Materni (Ge. Christ.) diff. de Chirurgia cum Medicina necessario conjungenda, 4to. Helmstad. 1732.
- Maubéi traité des Tumeurs & des Obstructions, 8vo. à Paris, 1702.
- Mauchart (Jo. Dav.) de Hernia Incarcerata, diff. 4to. Tubingæ, 1721.
- diff. de Ophthalmoxysi, 4to. ibid. 1726.
- Capite Obstipio, 4to. ibid. 1737.
- Maurer (Jo. Georg.) *Chirurgical Vade Mecum*, 8vo. Schaffhufæ, 1731. *In High Dutch.*
- Mauriceau (Franc.) Traité des Maladies des Femmes Grosses, 4to. Paris, 1712.
- Observations sur la Grossesse & l'Accouchement des Femmes, &c. 4to. ibid. 1695.
- Observations dernières sur les Maladies des Femmes grosses & accouchées, 4to. ibid. 1708.
- Aphorismes touchant la Grossesse, l'Accouchement, & les Maladies des Femmes, 12mo. Amst. 1700.
- Medicinisch und Chirurgisch Schatz-Kaeftlein, 8vo. Francof. & Lips. 1709.
- Medicus Theoria & Praxi instructus, five de internorum & externorum morborum curatione, 8vo. Genevæ, 1690.
- Meekren (Job.) *Medico-chirurgical Observations, in Dutch*, 8vo. Amst. 1668. *The same in High Dutch*, 8vo. Norimb. 1675. *The same in Latin*, 8vo. Amsterd. 1682.
- Meibomii (Henr.) diff. de Paracentesi in hydrope, 4to. Helmst. 1670.
- diff. de Suffusione, 4to. ibid. 1670.
- Bubonibus, 4to. ibid. 1671.
- Cancro Mammarum, 4to. ibid. 1673.
- Ulcerum natura & Curatione, 4to. ibid. 1674.
- Vulneribus lethalibus, 4to. ibid. 1674.
- Sanguinis Educatione, 4to. ibid. 1674.
- Læsionibus Cranii a Causa violenta externa, 4to. ibid. 1674.
- Tumoribus Pedum, imprimis œdematosis, 4to. ibid. 1679.
- Vulnerum natura & curatione, 4to. ibid. 1685.
- Hernia, 4to. ibid. 1686.
- Fluxu Humororum ad Oculos naturali & præternaturali, 4to. ibid. 1687.
- Venæsectionis in Variolarum Curatione usu, 4to. ibid. 1694.
- Catheterismo, 4to. ibid. 1699.
- Abscessibus internis, 4to. Dresdæ, 1718.
- (Jo. Henr.) de Flagrorum Usu in Re Venerea, 12mo. Lugd. Bat. sine anno.
- (Dan. Henr.) diff. de Patellæ Ossis læsionibus & curationibus, 4to. Francq. 1697.
- Melli (Sebast.) Chirurgo suegliato ou vero pratica Chirurgica, P. II. 8vo. Venet. 1717.
- Lancetta in pratica, cum Tract. de Scarificatione, 8vo. ibid. 1717.
- delle Fistole Lacrymale, 8vo. ibid. 1717.
- la Comare levatrice, *with Figures*, 4to. ibid. 1721.
- L'Arte Medico-chirurgica, Vol. I. 8vo. ibid. 1721.
- Pratica Chirurgica, P. I. 8vo. ibid. 1724.
- Memoires de l'Academie Royale des Sciences. *In these there are many Observations relative to Surgery.*
- Mercier (Petri le) Quæstio Medica, an ad extrahendum Calculum, dissecanda ad pubem Vesica, moderatore Nic. Pietreo, 4to. Paris. 1635.
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- Mercurio (Scipione) la Commare oricoglitrice, cum fig. 4to. Venet. 1621.
- Mery (Jean) manière de tailler pratiquée par Frere Jacques, avec un nouveau système de la Circulation du Sang par le trou ovale dans le Fœtus humain, 12mo. Paris, 1700.
- Meyer (Herm. Petr.) diff. de Punctura Vesicæ in Ischuria, 4to. Marburg. 1727.
- Meyfeldi (Jo. Godofr.) diff. de partu difficil. ex spastica stricture uteri circa placentam, 4to. Altorf. 1732.
- Mezgeri (Ge. Balth.) diff. de Arteriotomia, 4to. Tubing. 1670.
- Middleton (Jo.) On the high Operation for the Stone, 4to. Lond. 1727.



- Minadous (Jo. Th.) de humani Corporis turpitudinibus, fol. Patav. 1600.  
 Mindererus (Raymund.) *Military Medicine, with Cardilucius's Notes*, in High Dutch, 12mo. Norimb. 1679.  
 Mittermayer (Jo.) de Strumis Bünsgensium diss. 4to. Erford, 1723.  
 Moebii (Jo. Frid.) Observationes Miscellaneæ, 4to. Helmstad. 1730.  
 Moellenbroccius (Val. Andr.) de Varis, 8vo. Lipsiæ, 1663.  
 a Moinichen (Henr.) Observationes Medico-chirurgicæ, cum annotat. Lanzoni, 12mo. Ferrariæ, 1688.  
 Molinetti (Anton.) Dissertationes Anatomico-pathologicæ, 4to. Venet. 1675.  
 Momber (Ant.) *Of the Stone in the Kidneys and Bladder*, Helmst. 1735. cum fig. In High Dutch.  
 Monavii (Frid.) Bronchotomia, 8vo. Gryphiswald, 1652. & Jenæ, 1711. cum sylloge Morborum Oculi.  
 Monnier (L.) de la Fistule de l'Anus, 8vo. Paris. 1689.  
 Montagnana (Marc. Anton.) de Herpete, Phagedæna, Gangrena, Sphacelo, & Cancro, 4to. Venet. 1589.  
 Montanus Hier. de Febris, Chirurgicis auxiliis, Morbis Veneris, & Infantum Morbis, 4to. Lugd. 1558.  
 Morand. traité de la taille au haut Appareil, avec un dissertation de M. Morand & une lettre de M. Winslow sur la même Matière, 8vo. Paris, 1728.  
 Morasch (Jo. Adam.) de externis Capitis Morbis, 4to. Ingolst. 1719.  
 Moreau (Renat.) de Sanguinis missione in Pleuritide, 8vo. Par. 1622.  
 Mori (Horat.) Tabulæ universæ Chirurgiæ complectentes, Fol. Venetiis, 1572.  
 Moschionis de Morbis mulierum liber, Græce, cum variis Autoribus de eodem argumento tractantibus, 4to. Basil. 1546.  
 De la Motte (Guil. Mauquest.) traité de Chirurgie, Vol. 3. 12mo. Paris, 1722.  
 ———— Traité des Accouchemens, expliqué dans un grand nombre d' Observations, 4to. Paris, 1722.  
 Moyle (John) *Chirurgical Memoirs; being an Account of many extraordinary Cures*, 12mo. Lond. 1708.  
 Mulichii (Jo. Frid.) diss. de Variolarum Infusione, 4to. Altorf. 1725.  
 Mulleri (Jo. Matth.) Observationes & curationes Chirurgicæ rariores, 8vo. Norimb. 1714. item, de Effractura Cranii, 8vo. ibid. 1712.  
 ——— (Godofr. Guil.) diss. de partu difficili ex situ Uteri obliquo, 4to. Argent. 1731.  
 ——— (Guil. Henr.) diss. de Ankylosi, 4to. Lugd. Bat. 1707.  
 ——— (Theoph.) de von Winter Kranckheiten und Fontanellan, 8vo. Francof. 1687. *That is, of Winter Dis-eases and Fontanels. In High Dutch.*  
 Munnicks (Jo.) Wundartzney, 8vo. Francof. 1700. *That is, Surgery. In High Dutch.*  
 ——— Chirurgia, Amstel. 1715.  
 Muralti (Jo.) Chirurgische Schriften, 8vo. Basil. 1691. *That is, Chirurgical Works. In High Dutch.*  
 ——— Kinder-und Habammen-buch, 8vo. ibid. 1697. *A Treatise of Midwifry.*  
 ——— Schriften vnder Wundartzney, 8vo. ibid. 1711. *His Chirurgical Works.*  
 Muratori (Lud. Ant.) del Governo della Peste, a delle maniere di guardarsene, 8vo. in Brescia, 1721. 8vo. Modena, 1714.  
 Musitani (Car.) Chirurgische und Physikalische Schriften, 3 Vol. 8vo. Francof. 1701. *That is, Chirurgical and Physic-al Works. In High Dutch.*  
 ——— Opera omnia, Fol. Genevæ, 1716.  
 Mustigeri (Jo. Casp.) diss. de Luxationibus, 4to. Argentor. 1713.  
 Muys (Jo.) Observationes Chirurgicæ, 8vo. Lugd. Bat. 1684. & postea, 8vo. Amst. 1695.  
 ——— Podalirius redivivus, in quo multa Medica & Chirurgica examinantur, 12mo. Lugd. Bat. 1686.

## N.

- Narvatici (Matthiæ) Sylva Sententiarum ad Chirurgiam pertinentium, ex Hippocratis libris desumpta, cum Jac. Alberti Semeiotice & Frambesarii curatione tumorum, 8vo. 1632.  
 Nebelii (Dan.) diss. de Lithotomia, 4to. ibid. 1710.  
 ———— fœtus extractione ex Utero, 4to. Hei-delburg. 1713.  
 Nenneri (Franc.) Wundartzneybuch, 4to. Francof. 1578. *That is, of Surgery. In High Dutch.*  
 Neuteri (Ge. Phil.) de Vesicatoriorum Usu, 4to. Argent. 1704.  
 Niccolinis (Annibal. de) de Curativis & Mittendi Sanguinem Scopis, 4to. Perusæ, 1591.  
 Nicoli (Nic.) Opera Medica & Chirurgica, Fol. Venet. 1533.  
 Nolet. (Jos.) Observationes eil Medicine & Chirurgie, 12mo. à Brest, 1711.

- Norren (Erh.) Chirurgischer Wegweiser, 8vo. Norimb. 1717.  
 Novarini (Ant.) Chirurgia curiosa, Fol. Rotenburgi, 1682.  
 Nouvelle Methode d' Operations de Chirurgie, 12mo. Paris, 1693.  
 Nouvelles decouvertes sur toutes les parties de la Medicine, 12mo. ibid. 1679.  
 Nuck (Ant.) Experimenta & Operationes Chirurgicæ, 8vo. Jenæ, 1698.  
 ——— *The same in High Dutch, with Bassius's Notes*, 8vo. Halæ, 1728.

## O.

- Operations de Chirurgie, 12mo. Paris, 1693.  
 Oribasii Opera. See the Article ORIBASIIUS.  
 Orlobii (Jo. Frid.) diss. de Vesicatoriis, 4to. Lipsiæ, 1696.  
 Overkamp. (Heidenreich.) Beginselen tot de Geneef-en Heel-konst. 8vo. Amsterdam, 1681. *That is, the Foundation of Surgery, in Dutch.*  
 ——— Nieuw gebouw der Chirurgie, 8vo. ibid. 1682. *That is, a new Surgery, in Dutch.*  
 ——— Alle Medicinale, Chirurgicale, en Philosophische Werken, 4to. Amst. 1694.  
 ——— *The same in High Dutch, intituled, Overkamps Medicinische und Chirurgische Schriften*, 4to. Lips. 1705.

## P.

- Paaw (Petr.) Commentaria in Hippocratem de Capitis vulneribus, cum explicationibus in aliquot Capita libri octavi, Corn. Celsi, qui de Ossium Morbis agit, 4to. Lugd. Bat. 1616.  
 Palfyn (Jo.) *Surgery in Dutch, with Figures*, 4to. Leiden, 1710.  
 ——— *Chirurgical Observations, in High Dutch, with Figures*, Norimb. 1717.  
 ——— Anatomie du Corps Humain, avec des Remarques utiles aux Chirurgien dans la pratique de leurs Operations, c. fig. 8vo. Paris, 1726.  
 Pandolphinus (Joseph) de Ventositate Spinæ cum Notis Gc. Abr. Merklini, 12mo. Norimb. 1674.  
 Paniza (Lud.) de Phlebotomiis & Vini natura, 4to. Venet. 1534. & Fol. ibid. 1544.  
 ——— de Venæsectione in Inflammationibus quibuscunque, Fol. Venet. 1561.  
 Paoli (Pietro) Parere, &c. 4to. in Lucca, 1730.  
 ——— Riposira sopra alcune accuse dategli in un certo manifesto del Signor Anton. Benevoli, 4to. in Lucca, 1731.  
 Paræi (Ambrosii) Opera Chirurgica, Fol. Francof. 1594. 1610. & 1612.  
 ——— Oeuvres d' Ambrose Paré, Fol. Lyon. 1652.  
 Parisiis (Jo. de) *Surgery, in High Dutch*, 4to. Erford. 1544.  
 Parmæ (Hippoliti) Introductio in Chirurgiam, 4to. Patav. 1612.  
 ——— Praxis Chirurgica, sive Commentarius in Hippocratem de Capitis Vulneribus, 8vo. Venet. 1608.  
 Parrot (Wolffg. Ge.) diss. de Mola Uteri, 4to. Argent. 1733.  
 Patini (Car.) Oratio, quod optimus Medicus debeat esse Chirurgus, 4to. Patav. 1681.  
 Patuna (Nic.) *The History of a Fœtus expel'd by the Anus, &c. in Italian*, 8vo. Venezia, 1727.  
 ——— dell' Erpete, 4to. Venezia, 1729.  
 Pauli (Sim.) Programma de Officio Medicorum, Pharmacopæorum & Chirurgorum (extat in Quadripart. Botan. pag. 627).  
 Peccetii (Franc.) Opera Chirurgica, 8vo. Francof. 1619. prodierunt etiam Florent. apud Juntas, 1616. & Ticini, 1697. in Fol.  
 Pechlini (Jo. Nic.) Observationes Physico-medico-chirurgicæ, quibus accessit Ephemeris vulneris Thoracici, 4to. Hainburgi, 1691.  
 ——— diss. de Vulneribus Sclopetorum, 4to. Kiloni, 1674.  
 Petermanni (Andr.) Observationes Medicæ, 8vo. Lips. 1707.  
 ——— Casus Medico-legales decad. II. ibid. 1709.  
 Petit, (the Surgeon) l' Art de Guérir les Maladies des Os, 8vo. à Paris, 1705. edit. 1.  
 ——— traité des Maladies des Os, 2 Tom. 8vo. ibid. 1723. edit. 2.  
 ——— (the Physician) lettre dans laquelle il demontre, que le Cristalline est fort près de l' Uvée, avec de nouvelles preuves qui concernent l' Operation de la Cataracte, 4to. ibid. 1729.  
 Petrei Enchiridium Chirurgicum, in High Dutch, 4to. Marp. 1617.  
 ——— (Henr.) Handbuch der Wundartzney samt Hildani tractat vom heissen und Kalten Brand, 8vo. Norimb. 1625.  
 Peu, la pratique des Accouchements, c. fig. 8vo. Paris, 1694.  
 Pezoldi (Casp.) Observationes Medico-chirurgicæ, 8vo. Vra-tislaw, 1715.  
 Pfisteri (Alex.) diss. de Hydrofarcocoele, 4to. Basil. 1689.  
 Pfizer (Jo. Nic.) Vernünftiges wunden urtheil, 12mo. Norimb. 1674. *That is, of the Renunciation of Wounds. In High Dutch.*



- Pietrei (Nic.) *Quæstio medica, An ad extrahendum Calculum, dissecandum ad Pubem Vesica sit.*  
 Pigraci (Petri) *Epitome Præceptorum Medicinæ & Chirurgiæ,* 8vo. Paris, 1612.  
 ——— *Epitome des Preceptes de Medicine & Chirurgie,* 8vo. Lyon, 1628. & Rouen, 1649.  
 Pistoris (Chr. Frid.) *diff. de Fœtu e rupto Utero in Abdomen prorumpente,* 4to. Argent. 1726.  
 Platneri (Jo. Zach.) *diff. de Fistula Lacrymali,* 4to. Lips. 1724.  
 ——— *diff. de Scarificatione Oculorum,* 4to. 1728. c. fig.  
 ——— *Calculo ad Vesicam adhærescente,* 4to. 1737.  
 ——— *Progr. de Chirurgia, artis Medicæ parente,* 4to. 1721.  
 ——— *Chirurgorum Temeritate salutari,* 4to. 1721.  
 ——— *artē Obstetricia veterum,* 4to. 1735.  
 Plazzonus (Franc.) *de Vulneribus Sclopetorum,* 4to. Venet. 1618.  
 Plempii (Vop. Fort.) *Ophthalmographia,* Fol. Lovan. 1648.  
 Pohlil (Jo. Chr.) *diff. de Prostatis Calculo affectis,* Lips. 1737.  
 ——— *progr. de Abdominis Abscessu,* 1737.  
 ——— *Tumoribus Cysticis,* 1738.  
 Pons (Jac.) *de nimis licentiosa ac liberaliore intempestivaque sanguinis missione,* 8vo. Lugd. 1596.  
 Portal Pauli. *Prætic of Midwifry, in Dutch,* 8vo. Amst. 1690.  
 Portii (Jo. Dav.) *tract. de Tumoribus & in Specie de Spina Ventosa,* 12mo. Leoward, 1679.  
 ——— (Luc. Ant.) *Etasistratus, sive de Sanguinis missione,* 8vo. Romæ, 1682. it. 12mo. Venet. 1683.  
 Prat (Ellis.) *Vade mecum Chirurgicum, in High Dutch,* 8vo. Hamb. 1690.  
 Preussii (Maximil.) *Sciagraphia Vulnerum Lethalium,* Fol. Vratilav. 1712.  
 Prochisch *Observation on the high Operation, in High Dutch,* 4to. Regiomonti, 1727.  
 Putmanni (Matth. Godofr.) *der rechte und wahrhafte Feldscher,* 8vo. Halberstad. 1680.  
 ——— *große Wundartzney,* 4to. Francof. 1692. & 1705.  
 ——— *Schusswunden Curen,* 8vo. ibid. 1703.  
 ——— *curiose Chirurgische Observationes,* 4to. ibid. 1710.  
 ——— *Feldscherer und Pest barbiere,* 8vo. ibid. 1715.

## Q

- Quentin (Just. Ott.) *de Præparatione Gravidarum ad partum facilem,* 4to. Traj. ad Rh. 1697.  
 Quercetanus (Joseph.) *de Vulneribus Sclopetorum,* 8vo. Lugd. 1576.  
 Quelnay (François) *Observations sur les Effets de la saignée,* 12mo. Paris, 1730.

## R

- Ramelovii (Matth.) *Beschreibung des Nieren-Steins,* 8vo. Lips. 1679. *That is, On the Origin of the Stone in the Kidneys.*  
 Ranchini (Franc.) *Questions sur toute la Chirurgie de Guy de Cauliac,* 3 Parties, 2 Tomes, 8vo. Lyon, 1627.  
 Read, (William) *The whole Practice of Surgery,* 8vo. Lond. 1687.  
 ——— *on the Diseases of the Eyes,* 8vo. sine anno, Londini.  
 Reissens, (Jo. Casp.) *Anatomy and Surgery. In High Dutch,* 8vo. Augspurg. 1716.  
 Restaurant (Raym.) *de Inuisionibus sive Fonticulis,* 12mo. Lugd. 1681.  
 Rex (Sigism.) *Specimen Lithogenesiæ humanæ,* 12mo. Bern. 1689.  
 Rhodii (Jo.) *Observationes Medicinales,* 8vo. Patav. 1657. & Francof. 1676.  
 Rhodion (Euchar.) *de partu hominis, parturientium & infantum cura,* 8vo. c. fig. Francof. 1563.  
 Rhodius de Acia Corn. *Celli dissertatio, qua simul universa fibulæ ratio explicatur; accedit de Ponderibus & Mensuris veterum dissert. & vita Celli,* 4to. c. fig. Hafn. 1672.  
 Rhumelii (Jo. Phar.) *Opuscula Chymico-magica-medica de Medicina mulierum herniarum, &c.* 12mo. 1653.  
 Rhunenburgh (B. J.) *Examen des Chirurgiens,* 12mo. Rotterd. 1650.  
 Rhyne (Guil. Ten.) *de Arthritide ac punctura Chinesium & Japonensium, &c.* 8vo. Lond. 1683.  
 Riedlini (Viti) *Observationes Chirurgicæ rariores,* 8vo. Aug. Vind. 1702.  
 ——— *Bericht von den vornehmsten Verrichtungen eines Wundartztes,* 8vo. ibid. 1724.  
 Riolani (Jo.) *Chirurgia,* 8vo. Lips. 1601. it. 8vo. Paris. 1618.  
 Robergii (Laur.) *diff. de Pernionibus,* 4to. Upsal. 1722.  
 Robinson (Nic.) *on the Stone,* 8vo. Lond. 1723.  
 Romani sive Franc. *de Roma Consultationes Medico-chirurgicæ,* Fol. Neapoli, 1669.

- Roonhuysen (Henr.) *Chirurgical Cures. In Dutch,* Amst. 1663. and 1672. *In High Dutch,* 8vo. Norimb. 1674.  
 Rossetus (Franc.) *de partu Cæsareo,* 8vo. Paris. 1590. & ex editione atque additamentis Casp. Bauhini, Francof. 1601.  
 Rossii (Matth.) *Observationes medicæ, chirurgicæ, & practicæ,* 8vo. Francof. 1608.  
 Rost (Jo. Car.) *diff. de Ozæna,* 4to. Altorf. 1711.  
 Rota (Jo. Franc.) *de tormentariorum vulnerum natura & curatione,* 4to. Bonon. 1555.  
 ——— *de Sclopetorum Vulneribus,* 8vo. Venet. 1566.  
 Rothens (Jo. Phil.) *Surgery, and Chirurgical Lexicon,* 8vo. Wismar. & Lips. 1707. Lubec. & Wismar. 1720. 8vo. Lubec. 1734. with Figures. *In High Dutch.*  
 Rouhault (Pierre Sim.) *traité des Playes de tête,* 4to. Turini, 1720.  
 Rubei (Hier.) *annotationes in C. Celsum,* 4to. Venet. 1616.  
 Rudius (Eustach.) *de Chirurgicis, sive externarum partium affectibus,* Fol. Venet. 1606.  
 ——— *de Tumoribus,* p. n. 4to. ibid. 1600.  
 ——— *Ulceribus,* 4to. Patav. 1602.  
 Rueff (Jac.) *de Conceptu & Generatione, ubi simul de arte Obstetricandi tractatur,* 4to. c. fig. Tiguri, 1554.  
 ——— *de Tumoribus quibusdam Phlegmaticis,* 4to. Tiguri, 1556.  
 Ruffen (Jac.) *Hebammen buch,* 4to. Francof. ad Moen. 1600. *A Book of Midwifry.*  
 Ruleau (Jo.) *vom Kayserlichen Schnitt,* 8vo. Norimb. 1716.  
 Ruyschii (Frid.) *A Treatise on the Cæsarean Section. See an Account of his Works under the Article ANATOMIA.*  
 Ryff. (Gualt. Herm.) *große Chirurgie,* Fol. Francof. 1545. c. fig.  
 ——— *Hebammen buch,* 4to. ibid. 1600. prodiit antea, 8vo. ibid. 1569. c. fig. *A Treatise on Midwifry.*

## S

- Sachsische Wehmutter, 8vo. Francof. 1701.  
 Saliceto (Gulielmus de) *In Gesner's Collection. See Chirurgici Scriptores.*  
 Salzmanni (Jo.) *diff. de Chirurgia curtorum,* 4to. Argentor. 1713.  
 ——— *mira Cranii Fractura,* 4to. ibid. 1718.  
 ——— *Tumoribus quibusdam serosis,* 4to. ibid. 1719.  
 ——— *amputandi Membra nova Methodo,* 4to. ibid. 1722.  
 ——— *Femoris Luxatione rariore, frequentiori Colli Fractura,* 4to. ibid. 1723.  
 Sancassini (Dionysii Andr.) *il Chirone in Campo,* 8vo. Venet. 1708.  
 ——— *Aforismi della cura delle ferite,* 8vo. ibid. 1713.  
 Sancti (Mariani) *de Lapide Renum, itemque de Lapide Vesicæ per Incisionem extrahendo,* c. fig. 4to. Paris. 1540.  
 Sanden (Henr. von) *Observatio de Prolapsu Uteri inversi,* 4to. Regiomont. & Lips. 1723.  
 Santinelli (Barth.) *Confusio transfusionis, sive confutatio transfusionis sanguinis,* 8vo. Romæ, 1668.  
 Santorini *Istoria d' un feto estratto felicemente intero dalle parti deretane,* 4to. in Venet. 1727.  
 Saporta (Ant.) *de Tumoribus,* 12mo. Lugd. 1624.  
 Sartorii (Petri) *Franzosen cur.* 8vo. Lips. & Erfurt. 1685.  
 Saviard *nouveau recueil d' Observations Chirurgicales,* 8vo. à Paris, 1702.  
 Scacchi (Durantis) *Subsidium Medicinæ sive Chirurgia,* 8vo. Urbini, 1596.  
 Scala (Dominici la) *Phlebotomia damnata,* 4to. Patav. 1696.  
 Schacheri (Polyc. Gottl.) *diff. de Cataracta,* 4to. Lipsiæ, 1701.  
 ——— *diff. de Labiis Leporinis,* 4to. ibid. 1704.  
 ——— *Bronchotomia,* 4to. ibid. 1707.  
 ——— *Fonticulis,* 4to. ibid. 1722.  
 ——— *Fœtus excisione ex utero Matris mortuæ non negligenda,* 4to. ibid. 1731.  
 ——— *Epiptocle,* 4to. ibid. 1734.  
 Scholhammeri (Gunth. Chr.) *diff. de Suffusione,* Jenæ, 1691.  
 ——— *diff. de Epulide & Parulide,* 4to. ibid. 1692.  
 ——— *Liber de humani Corporis Tumoribus,* 4to. ibid. 1701.  
 ——— *diff. de Fonticulis,* 4to. ibid. 1696.  
 ——— *Spina Ventosa,* 4to. Kil. 1698.  
 ——— *Odontalgia tactu sedanda,* 4to. ibid. 1695.  
 Schenck (Jo. Theodor.) *diff. de Vexatorum Curatione,* 4to. Jenæ, 1670.  
 Scheuchzeri (Jo. Jac.) *A Dissertation upon the Plague in Provence; wrote in Latin, French, and High Dutch,* 4to. Tiguri, 1721.  
 Scheurl (Christoph. Theophr.) *de Arteriotomia,* 12mo. Norimberg, 1666.



- Schirlæus (Thom.) de Causis & Curatione Calculi, 8vo. Hamb. 1675.
- Schmidii (Andr. Chr.) *The Cure of a dangerous Wound of the Head*, In High Dutch, 4to. Rintellii, 1732.
- (Henr. Victor.) dissert. de Pædarthrocace, 4to. Lugd. Bat. 1721.
- (Joseph.) Gründliche Erforschung vom Aderlassen und Schröpfen, nebst curirung der Franzosen, 12mo. Augst. Vind. 1653. *A Treatise on Phlebotomy*.
- Spiegel der Wundartzney, 4to. Ulmæ, 1656.
- Kriegs-artzney, 12mo. Francof. 1664.
- Description of Chirurgical Instruments. In High Dutch, 12mo. Aug. Vindel. 1697.
- Medicinisches und Chirurgisches Schatz Kästlein, 8vo. Francof. 1709.
- Neu und wohleingerichteter Feld Kasten vor Wundartzney, 8vo. ibid. 1710.
- Schneidermannus (Jo.) de Phlebotomia, 12mo. Helmstad. 1681.
- Schobingeri (Jo. Casp.) diff. de Fistula Lacrymali, 4to. Basil. 1730.
- Schorer (Christoph.) vom Nutzen und Gebrauch der Fontanellen, 8vo. Lips. f. a. It. Augst. Vind. 1686. 12mo. *A Treatise on the Use of Fontanels*. In High Dutch.
- Schoute (Walth.) het gewonde Hooft, 8vo. Amst. 1694. *A Dutch Treatise, on Wounds of the Head*. The same in High Dutch, intitled, Walther Schultzens verletzter Kopf, 8vo. Lipsiæ, 1695.
- Schraderi (Frid.) diff. de partu difficili, 4to. Helmstad. 1685.
- diff. de vulnerum Cura, 4to. ibid. 1695.
- (Christoph.) diff. de Hirudinibus, 4to. Erford. 1713.
- Schreiberi (Sam. Gotth.) diff. de partu difficili, 4to. Francof. ad Viadr. 1736.
- Schuckmanni (Jo. Henr.) diff. de Herniotomia absque Castratione instituenda, præside Waldschmidio, 4to. Kil. 1730.
- Schulze (Jo. Henr.) dissert. an umbilici deligatio in nuper natis absolute necessaria sit? 4to. Halæ, 1733.
- diff. de Anatomes ad praxin Chirurgicam summa necessitate, 4to. ibid. 1737.
- Schützens (Tob.) Chirurgischer Hand-leiter, 8vo. Lips. 1687. It. 8vo. Berolin. 1714.
- Schwartzens (Jo. Casp.) Gezerrete Narren Kappe der Bader und Barbierer, 12mo. Freiburg. 1702.
- Vier Dutzend Anmerckungen von Wunden, 8vo. Hamburgi, 1713.
- Anmerckungen fünftes Dutzend, 8vo. ibid. 1718.
- Of Clysters, Water-drinking, Tea, and Tobacco. In High Dutch, 8vo. ibid. 1723.
- Schylandri (Corn.) Practica Chirurgiæ, 8vo. Antverp. 1577.
- Sculteti (Jo.) Armamentarium Chirurgicum, Fol. Ulmæ, 1655. c. fig. max.
- Idem, 4to. Francof. 1666. & 8vo. Amstel. 1669.
- Idem, cum notis Lamzwerdii, Amst. 1672. postea iterum cum notis Lamzwerdii & Tilingii, 8vo. Lugd. Bat. 1693.
- L' Arsenal de Chirurgie, enrichi de 50 Figures, &c. 4to. Lyon, 1675. & 1712.
- Trichiasis admiranda, 12mo. Norimb. 1658.
- Sebizii (Melch.) examen vulnerum partium similium, 4to. Argent. 1635.
- lethalium, cum tract. de Synovia, 4to. ibid. 1639.
- de Balsamatione Cadaverum, 4to. ibid. 1649.
- Commentarius in libros Galeni de Curandi ratione per sanguinis missionem, de Hirudinibus, Revulsione, Cucurbitula, Scarificatione, 4to. ibid. 1652.
- Sennertus (Dan.) in Praxi Medica, quæ sæpius variis in locis prodiit, multa tractat. Chirurgica.
- Severinus (Marc. Aur.) de recondita Abscessuum Natura, 4to. Neapoli, 1632. it. 4to. Francof. 1643. cum fig. it. Lugd. Bat. 1724.
- de Efficaci Medicina, Fol. Francof. 1646.
- trimembris Chirurgia, 4to. ibid. 1653. it. Lugd. Bat. 1725.
- Synopsis Chirurgiæ, 12mo. Amstel. 1664.
- Sharp, A Treatise on the Operations of Surgery, by Samuel Sharp, Lond. 1739. the second Edition.
- Sigemundin (Justina) Brandenburgische Hoff-wehmutter, 4to. Berolini, 1689. & 1708. *This is esteem'd a good Treatise on Midwifry*.
- Defensio sive Apologia contra Objectiones Andr. Petermanni, Medici Lipsiensis, 4to. Coloniz ad Spream, 1692.
- Silva (Jean. Bapt.) Traité de l' Usage des differentes sortes de saignées, principalement de celle du pied, 12mo. Amst. 1729.
- Silvaticus (Jo. Bapt.) de Secunda Vena in putridis Febribus, 4to. Mediolani, 1583.
- Slevogtii (Jo. Hadr.) diff. de Carie Cranii, 4to. Jenæ, 1695.
- Slevogtii diff. de Fonticulo Suturæ Coronalis, Memoriz Re-medio, 4to. ibid. 1696.
- Ligaturarum Usu in Hæmorrhagiis, 4to. ibid. 1697.
- Paracenthesi Thoracis & Abdominis, cum Progr. de Scarificatione Hydropicorum, 4to. ibid. 1697.
- Vaginæ Uteri Lapsum, 4to. ibid. 1700.
- Secundinarum Retentione, 4to. ibid. 1704.
- Urinæ Incontinentia, 4to. ibid. 1707.
- Cauteris, 4to. ibid. 1708.
- Instrumentis Hippocratis Chirurgicis, hodie ignoratis, 4to. ibid. 1709.
- Partu Cæsareo, 4to. ibid. 1711.
- Embryulcia Hippocrat. 4to. ibid. 1715.
- Fungosis Artuum Tumoribus, 4to. ibid. 1715.
- Tumoribus tunicatis, 4to. ibid. 1719.
- Vulnerum Exploratione, 4to. ibid. 1721.
- Solingen (Corn.) Embryulcia, in Dutch, 12mo. Hagæ Com. 1673.
- Surgery, in Dutch, 4to. Amst. 1684. & postea, 4to. ibid. 1698.
- Sommers (Jo. Georg.) Hebammen-schul, c. fig. 12mo. Coburg. 1664. 1691. & 1715. *A Treatise of Midwifry*.
- Sorbait (Pauli de) Praxis Medica, cujus tractatus VI. de Chirurgia & Examine Chirurgorum agit, quo in opere etiam ejus Consilium de Peste laudatissimum continetur, Fol. Viennæ, 1701.
- *A Treatise of Midwifry in High Dutch*, 8vo. sine anno impressionis.
- Sperlingii (Paul. Godofr.) diff. de Suffusione, 4to. Viteberg. 1684.
- diff. de Strumis & Scrophulis, 4to. ibid. 1707.
- Sporischii (Jo.) Idea boni Medici, cum tractatu de Symptomatibus crudelissimis, quæ Scarificationi & Cucurbitularum usui Brunæ incolis in Moravia supervenerunt, 8vo. Francof. 1582.
- Sproegeli (Dieter.) Observationes Chirurgicæ selectiores, 4to. Helmst. 1720.
- Stahl (Ge. Ern.) diff. de Hirudinibus five Sanguisugis, 4to. Halæ, 1699.
- diff. de Abscessu & Furunculo, 4to. ibid. 1701.
- Narium Scarificatione Ægyptiaca, 4to. Halæ, 1701.
- Fistula Lacrymali, 4to. ibid. 1702.
- Vulnerum Lethalitate, 4to. ibid. 1703.
- Medicinæ & Chirurgiæ perpetuo nexu, 4to. ibid. 1705.
- Officio Medici in Casibus Chirurgicis, 4to. ibid. 1710.
- Chirurgia Medica, 4to. Halæ, 1713.
- Grundliche Abhandlung des Aderlassens, dessen Gebrauch und Misbrauch, 8vo. Lips. 1719. *On the Use and Abuse of Phlebotomy*.
- Introduction to Surgery, in High Dutch, 8vo. ibid. 1730.
- Steinii (Godofr.) Lithographia curiosa, 8vo. Baruthi, 1707.
- Stentzelii (Chr. Godofr.) tract. de Asyilis Ignorantiæ in Medicina & Chirurgia, cum tract. de Naturæ Stahlianæ in Chirurgia Impotentia, 4to. Viteb. 1729.
- de Steatomatibus & Tumoribus Cysticis, 4to. ibid. 1733.
- Sterre (D. L.) *New Practice of Surgery*, in High Dutch, 8vo. Dresdæ, 1701.
- Stigleri (Sam.) diff. de Oscheoceles five Hernia Scroti, 4to. Argentor. 1681.
- Stiller (Jo. Andr.) de Machinis fumiductoriis curiosis, 4to. Hamburgi, 1686. c. fig.
- (Po. Chr.) *Of Midwifry*, in High Dutch, 8vo. Lips. 1712.
- Stoer (Gerh.) Untersuchung der Frage, ob es nöthig, nützlich, billig und möglich, die Medicin, Chirurgie und Apotheckerkunst in einer Person zu vereinigen, 4to. Helmst. 1727.
- Stoschii (Henr. Sigism.) diff. de Contrahitura, seu Resonitu, Experientia comprobato, 4to. Argent. 1722.
- Stuarti (Petri) diff. de Secundinis Salutiferis & nocivis, 4to. ibid. 1736.
- Stylle (Peter von der) *Manual of Surgery*, in High Dutch, 8vo. Hafn. 1651. item Francof. 1682.
- Suevus (Bernh.) de Inspectione Vulnerum Lethalium, 8vo. Marpurgi, 1629.
- T.
- Taboris (Gerh.) diff. de nova Cancrum extirpandi Methodo, 4to. Lugd. Bat. 1721. c. fig.
- Tagaultius (Jo.) de Chirurgica Institutione, cum Jac. Hollerii libro de Materia Chirurgica, 8vo. Lugd. 1547. Idem, Venetiis, 1544. cum indice locupletissimo, 8vo. ibid. 1549. In Italian. Venet. 1550.



- Tagaultius Institutionis Chirurgicæ libri V. de Tumoribus, Vulneribus, Ulceribus, Fracturis, & Luxationibus, Fol. 1610. extat in Gesneri Scriptoribus optimis Tiguri. 1555. fol.
- Taliacotii (Casp.) de Curtorum Chirurgia, Fol. Venet. 1597. cum fig.
- Chirurgia nova curtorum, five de Narium, Aurium, Labiorumque Defectu, &c. 8vo. Francof. 1598. c. fig.
- Taranta (Valesci de) Gazophylacium Pharmacicæ & Chirurgiæ, five Philorium Pharmaceutico-chirurgicum, 4to. Francof. 1680. & 4to. Lips. 1714.
- Tassins (Leonh.) Chirurgie militaire, ou l'Art de guerir les Playes d'Arquesades, 12mo. Nymwegiæ, 1673. & 8vo. Pars, 1688.
- Taylor (Jo.) of the Cataract and Glaucoma, 8vo. Lond. 1736.
- le Mechanisme du Globe de l'Oeil, avec l'Usage de ses differentes Parties, 8vo. à Paris, 1738. cum fig.
- Teichmeyer (Hern. Frid.) diss. de Scrophulis, 4to. Jenæ, 1708.
- diss. de Ventriculi Instrumento repurgatorio, 4to. ibid. 1712.
- Cancro Mammarum, 4to. ibid. 1732.
- Aneurysmate stupendo in Brachio, 4to. ibid. 1734.
- Morfu Canis non rabidi pernicioso, 4to. ibid. 1736.
- Tencke (H.) Instrumenta Curationis Morborum, ex Pharmacia, Chirurgia, & Dieta, 12mo. Lugduni, 1681.
- Theatrum Sympatheticum, five de Pulvere Sympathetico & Unguento Armario, 4to. Norimb. 1662.
- Thevenin (François) Oeuvres de la Chirurgie, 4to. Paris, 1669.
- Thurinus (And.) de Curatione Pleuritidis per Venæsectionem, 4to. Lugd. 1538.
- Tolet (Franc.) Traité de la Lithotomie, 12mo. à la Haye, 1686. & 8vo. Paris, 1689.
- Tralles (Balth. Ludov.) de Vena Jugulari frequentius secanda, 8vo. Vratisslau. 1735.
- Trew (Chr. Jac.) Von einer raren Hauptwunde, 4to. Norimbergæ, 1724.
- Troni (Petr. Martyr.) de Ulceribus & vulneribus Capitis, 4to. Ticini, 1584.
- Tulp (Nic.) Observationes, 8vo. Amst. 1672. Item, Lugd. Bat. 1716.
- Turner (Dan.) wrote a great many *Chirurgical Pieces*.

## V

- Valentini (Mich. Bernh.) Præcos Medicinæ Infallibilis Pars altera Chirurgica, cum fig. 4to. Francof. 1715.
- Vallæ (Ge.) de Universi Corporis Purgatione per Frictionem, Venæsectionem, Cucurbitulas, &c. 8vo. Argent. 1529.
- Valleriolæ (Franc.) Observationes Medicinales, libri VII. Lugd. 1588.
- Vateri (Abr.) diss. de Variolarum per Infusionem Transplantationem, 4to. Vitebergæ, 1720.
- de Inoculationis Variolarum in Nova Anglia Successu, 4to. ibid. 1723.
- diss. de Vulnerum in Intestinis Lethalitate, 4to. ibid. 1720.
- Vulnere Cerebri Sclopetario, septima hebdomade absolute lethali, 4to. ibid. 1722.
- Sarcomatis Uteri, salva Vita, e Pudendo Muliebri Sectione sublata Historia, cum Figura, 4to. ib. 1728.
- Mola, 4to. ibid. 1729.
- Gangrena per Chinam Chinæ sistenda, 4to. ibid. 1734.
- Antidoto novo adversus viperarum morsus, 4to. ibid. 1636.
- (Chr.) diss. de partu Cæsareo, 4to. Viteb. 1695.
- diss. de Ulceribus Fistulosis, 4to. ibid. 1700.
- Vesicæ, 4to. ibid. 1709.
- Trachomate, 4to. ibid. 1704.
- Vulneribus, 4to. ibid. 1712.
- Suffusione Oculorum, 4to. ibid. 1715.
- Gangrena, 4to. ibid. 1717.
- Vauguion; Traité complet des Opérations de Chirurgie, c. fig. 8vo. à Paris, 1698.
- Verbrug's (Jo.) Practice of Chirurgical Medicine. In High Dutch, 8vo. Dordræ, 1715.
- Land and Sea Surgery. In Dutch, 8vo. Amsterd. 1704.
- Vercelloni (Jac.) de Pudendorum Morbis, 4to. Astæ, 1716.
- Verduc (Jo. Bapt.) Manière de guerir les Fractures & les Luxations par le Bandages, 8vo. à Paris, 1689. item, 1712. edit. III.
- Traité des Opérations de Chirurgie avec un Sommaire des Bandages, & un discours sur la Verole, à Paris, 1703.
- Pathologie de Chirurgie, Tomes II. edit. quinta, 8vo. Amst. 1717.

- Verduin (Petr. Adrian.) de Nova artuum decurtandorum ratione, 8vo. Amst. 1696. In French, 8vo. 1697. with Figures.
- Verna (Jo. Bapt.) Princeps Medicaminum omnium Phlebotomia, 4to. Patav. 1716.
- Verpoorteni (Jo. Guil.) diss. de Ramice five Hernia varicosa, 4to. Lugd. Bat. 1706.
- Vesalii (Andr.) diss. de Vena Axillari in Pleuritide Secanda, 4to. Basil. 1539.
- Chirurgia magna, 8vo. Venet. 1569.
- Veslingii (Jo.) Observationes & Epistolæ varias res Chirurgicas continent. 8vo. Hafn. 1664.
- Vesti (Justi) diss. de Struma, 4to. Erf. 1685.
- diss. de pulvere Sympathetico, 4to. ibid. 1687.
- Viardel (Cosmus) Anmerkungen von der weiblichen so wohl natürlichen als unnatürlichen Geburt. 8vo. Francof. 1676. cum fig. A Book of Midwifry. In High Dutch.
- Vidii (Vidi) Opera omnia Medica, Chirurgica, & Anatomica, c. fig. III. Vol. Fol. Francof. 1668.
- Vigierii (Jo.) Opera Medico-chirurgica, 4to. Hag. Com. 1659.
- Vigo (Jo. de) Chirurgia, cum Chirurgia Mariani Sancti Bero-litani, 8vo. Lugd. 1530. 1534. 1540. & 1582.
- Practica in Chirurgia, 4to. Lugd. 1516. & 1582.
- The same in French, 8vo. ibid. 1537.
- The same in Italian, 4to. Venet. 1560. & 1568. And,
- The same in High Dutch, 4to. Norimb. 1677.
- Voelters (Christoph.) Hebammen-Schul, 8vo. Stuttgardia, 1687. The School of Medicines.
- Voetii (Jo. Euseb.) diss. de Ozæna, 4to. Lugd. Bat. 1725.
- Vogel (Zachar.) Abhandlung aller arten der Bruch, cum fig. 8vo. Lips. 1738. A Treatise on Ruptures. In High Dutch.
- Voorde (Corn. von der) Lichtende Fakkel der Chirurgie, 4to. Middelburgi, 1664. & 1680. A Dutch Treatise on Surgery.
- W
- Wagneri (Rud. Chr.) diss. de Contrafflura, Jenæ, 1708.
- Wagret Observations de Medicine & Chirurgie, 8vo. à Paris, 1718.
- Wahrendörffers (Jo. Petri) Unterricht vom Aderlassen, 8vo. Budissinæ, 1719. Instructions for Bleeding.
- Wahrmund. Of Scarification. In High Dutch, 8vo. 1690.
- Waldschmidii (Jo. Jac.) Opera medica, quibus continentur notæ ad Chirurgiam Barbetti, 4to. Francof. 1695. item.
- diss. de Chirurgo Cartesiano, & alia de Pernionibus.
- (Wilh. Hulderic.) diss. de Spina Ventosa, Kiliz, 1718.
- diss. de Fracturis Ossium sine violenta causa, 4to. ibid. 1721.
- Variolarum Infusione, 4to. ibid. 1725.
- Arteriarum vulneribus in artubus sæpe functis, raro lethali, 4to. ibid. 1728.
- Waltheri (Con. Lud.) Observationes Medico-chirurgicæ, 8vo. Lips. 1715.
- Of a Spina Ventosa. In High Dutch, 8vo. ibid. 1715.
- (Henr.) Unterricht von Kopf-wunden, 8vo. ibid. 1718. On Wounds of the Head. In High Dutch.
- (Aug. Frid.) diss. de Obstetricum erroribus, 4to. ibid. 1729.
- Wedelii (Ge. Wolffg.) diss. de Setaceis, 4to. Jenæ, 1673.
- diss. de Paronychia, 4to. ibid. 1674.
- Pernionibus, 4to. ibid. 1680.
- Bubone pestilenti, 4to. ibid. 1681.
- Gibbere, 4to. ibid. 1681.
- Hernia, 4to. ibid. 1683.
- Casu ab alto, 4to. ibid. 1683. & 1684.
- Vulnere Capitis, 4to. ibid. 1684.
- Clavo Pedis, 4to. ibid. 1686.
- Nervorum Punctura, 4to. ibid. 1689.
- Cucurbitula sicca, 4to. ibid. 1691.
- Fundamentis Vulnerum lethali, 4to. ibid. 1695.
- Verrucis, 4to. ibid. 1696.
- Procidentia Ani, 4to. ibid. 1696.
- Aneurysmate, 4to. ibid. 1699.
- Ichuria, 4to. ibid. 1699.
- Ligaturarum Ufu in Hydrope, 4to. ibid. 1703.
- Lithotomia, 4to. ibid. 1704.
- Cancro Mammarum, 4to. ibid. 1704.
- Phimosi & Paraphimosi, 4to. ibid. 1705.
- Testium tumore, 4to. ibid. 1706.
- Atretis, 4to. ibid. 1709.
- Carie Ossium, 4to. ibid. 1713.
- Mola, 4to. ibid. 1714.
- Spina Ventosa, 4to. ibid. 1715.
- Narium Polypo, 4to. Jenæ, 1715.
- Peripneumonia, Empyemate & Abscessibus internis, 4to. ibid. 1717.



- Wedelij (Ge. Wolffg.) diff. de Gangræna, 4to. ibid. 1719.  
 ——— (Jo. Adolph.) diff. de partu difficili, 4to. ibid. 1730.  
 ——— diff. de partu difficili ex infante Brachio prodeunte, respondente primo Parisio, & postea Weismanno, 4to. ibid. 1732.  
 ——— Testium tumore venereo, 4to. ibid. 1735.  
 Welschii (Godofr.) *Treatise on Midwifry, translated from the Italian of Scipio Mercurio into High Dutch, with Additions*, 4to. Lips. 1652. edit. I. & Vitebergæ, 1671. edit. II. *with Figures*.  
 ——— Vulnerum Lethalium Judicium, 8vo. Lips. 1660. *Also in High Dutch*, 8vo. Norimb. 1719.  
 ——— (Ge. Hier.) Consilia, Curationes & Observationes, 4to. August. Vindel. 1698.  
 ——— Observationes Physico-medice, 4to. ibid. 1675. c. fig.  
 Wepferus (Jo. Jac.) de Affectibus Capitis internis & externis, 4to. Scaphus. 1727.  
 Werenfeldii (Conr.) diff. de Inversione Uteri, Præf. Bergenio, 4to. Francof. ad Viadr. 1732.  
 Westphals (El.) Schiff-barbier, 8vo. sine loco, 1683. *Naval Surgeon*.  
 Weypert (Jo. Franc.) Trifolium Chirurgicum. *In High Dutch*, 8vo. Hamb. 1697.  
 Widemannia (Barbara) Anweisung Christlichen Hebammen, c. fig. 8vo. August. Vindel. 1735. *A Treatise on Midwifry*.  
 Widemann (Franc.) Vom Stein und Bruchschneiden, wie auch vom Staarstechen, c. fig. 8vo. ibid. 1719.  
 ——— Collegium Chirurgicum über die Bandagen, 8vo. ibid. 1735.  
 Wiel (Stalpart van der) Observationes rariores, 2 Vol. 8vo. Lugd. Bat. 1687.  
 Wierii (Jo.) Observationes Medicinales & Chirurgicæ, 4to. Basil. 1567. & 12mo. Amstel. 1657.  
 Wiseman (Richard) Chirurgical Treatises, fol. Lond. 1676. & 1719. 8vo. ibid. in 2 Vols.  
 Witte (Jac.) diff. de Ischuria, 4to. Lugd. Bat. 1717.  
 Wittichii (Jo.) Consilia, Observationes & Epistolæ medicæ, 4to. Lips. 1604.  
 ——— de Chirurgicis Administrationibus, in tract. de Medicamentorum simplicium & compositorum Methodo, 8vo. ibid. 1596.  
 Wolfii (Ido.) Observationes Chirurgico-medice, 4to. Quedlinb. 1704.  
 Woolhouse Experiences des differentes Operations manuelles, & des Guerisons specifiques, que le Seigneur de Woolhouse a toujours pratiquées aux Yeux, 8vo. à Paris, 1712.  
 ——— (Th.) Dissertations sçavantes & critiques sur la Cataracte & Glaucome, 8vo. Offenbaci, sine anno.  
 ——— Dissertationes de Cataracta & Glaucomate, 8vo. Francof. 1719.  
 Woyts (Jo. Jac.) *Surgery, in High Dutch*, 8vo. Dresdæ, 1715.  
 ——— Von tfolichen wunden, 8vo. ibid. 1716.  
 ——— Thesaurus Pharmaceutico-chirurgicus, 8vo. Lips. 1696.  
 Wieden (J. E.) Von inoculirung der Pocken, 8vo. Hanover. 1726. *This is a Treatise on Inoculation*.  
 ——— (Otto Just.) Anweisung zur Chirurgischen praxi, in qua de Vulneribus agitur, 8vo. Hanover. 1732. *An Introduction to Surgery*.  
 Würtzen (Felix) Wundartzney, 8vo. Basil. 1576. 1596. 1638. & 1687. item Neustadii, 1597.

## Y.

- Younge (James) Account of the many admirable Virtues of Oleum Terebinthinæ, particularly in Wounds and Hemorrhages; a new Way of Amputation, and speedier curing Stumps, 8vo. Lond. 1679.  
 ——— Wounds of the Brain, &c. 8vo. ibid. 1682.  
 Yves (Charles de Saint) Traité des Maladies des Yeux, 8vo. à Paris, 1722.

## Z.

- Zacchia (Pauli) Quæstiones Medico-legales, fol. Francof. 1666.  
 Zapata (Jo. Bapt.) secreti di Medicina & Chirurgia, 8vo. Venetiis, 1618. *In Latin*, 8vo. Ulmæ, 1696.  
 Zechii (Jo.) Consultationes Medicinales, 4to. Venet. 1627.  
 Zelleri (Jo.) diff. de Funiculi Umbilicalis ligandi necessitate, 4to. Tubingæ, 1692.  
 Zittmanni (Jo. Frid.) Medicina forensis, 4to. Lips. 1706.  
 Zobelii Chimische, Medicinische und Chirurgische Perle, 8vo. Dresdæ, 1701.  
 Zwingeri (Theodor.) diff. de Calvarie Perforatione, Basil. 1715.  
 ——— Theatrum Praxeos Medicæ, 4to. ibid. 1710.  
 ——— Dissertatio de Morbis Præliantium, 4to. ibid. 1715.

As I have not seen all these Authors, I cannot be answerable, that there are no Mistakes. This Catalogue is taken principally from *Heister*.

CHIST. The Name of a Measure. See *SEXTARIUS*.

CHITON, χιτών. A Coat or Membrane. See *MEMBRANA*.

CHIVEF Theveti, J. B. *Ficui Nigritarum similis, Fructu magno Meloni pari*, C. B. is described to be a cucurbitiferous Tree, with a fine green Leaf, exactly round, and of the Breadth of a *Louis d'Or*, and with a Fruit as big as a large Melon, very sweet, and melting in the Mouth like Manna, and inclosing Seeds, like those of our Cucumber, within a Rind, which is yellow when ripe. *Raii Hist.*

CHIVES are the fine Threads of Flowers, or the little Knobs, which grow on the Tops of these Threads.

*Chives, tipped with Pendants*, are the Apices of Flowers, having Farina hanging and shaking at their Points, as the Tulip.

CHIVETS. These are the small Parts at the Roots of Plants, by which they are propagated. *Miller's Dictionary*, Vol. 1.

CHIUM VINUM, χῆσι δινῶν, *Chian Wine*, or Wine of the Growth of the Island of *Chios*, now *Scio*, is commended by *Dioscorides*, *Lib. 5. Cap. 10.* as affording good Nourishment, fit to drink, less disposed to intoxicate, endued with the Virtue of restraining Defluxions, and a proper Ingredient in ophthalmic Medicines. Hence *Scribonius Largus*, No. 26. 36. directs the dry Ingredients in Collyria for the Eyes, to be made up with *Chian Wine*.

CHLÆNA, χλαίνα, in *Erotian* upon *Hippocrates*, is expounded by τὰ καινὰ ἱμάτια, "new Garments."

CHLIAROS, χλιαρός, tepid, lukewarm. *Galen*, on *Aph. 37. Lib. 4.* bestows this Epithet on mild Fevers, in Opposition to acute. The same Author says, *M. M. Lib. 1. Cap. 7.* that χλιαρός, tepid, is a Medium between hot and cold.

CHLIASMA, χλιασμα, from χλαινωμαι, to grow tepid, is a tepidactory or warming Fomentation of the moist Kind, as πνεῖν (*Pyræ*) is of the dry Kind, and both are directed, *Lib. 1. περὶ γυναικ.* In *Lib. de Rat. Vill. in Acut.* they are call'd θερμάσματα (*Thermasmata*); and, in the same Book, χλιασμαῖα are prescrib'd in Pains of the Sides, to promote Concoction and Spitting.

CHLOE, χλόη, in the *Ionic Dialect* χλοῖν, is the green Herb, or Grass. Hence χλωδύς, and χλωδύς, is a pale or faint Green; and χλός, or χλός, is a green Colour, inclining to Paleness, like that of withering Herbs. Χλωδύς, in *Coac.* apply'd to Urine, signifies green, or a pale Green; and χλωδύς, those of a palish-green Colour, in the same Treatise, are call'd, *Lib. Prorrhet. κίττεινοι, Ictericæ*, "sick of the yellow Jaundice." This Colour, *Galen*, *Lib. 3. περὶ δύσπν.* takes to be a Sign of a diseased Liver.

CHLORASMA, χλωρσma, from χλωρός, [see the following Word] is expounded, in *Galen's Exegesis*, χλωεῖτις λαμπρὸν διαυγμῖν, καὶ ἐπὶ τὸ ὑδαρώδες ῥέπασσα. "A palish-green Colour, shining with a sort of Splendor, and inclining to a watry."

CHLOROS, χλωρός, is a Word of an ambiguous Signification in *Hippocrates*. Sometimes it means a palish Green, sometimes Pale, also a yellow and palish, and an herbaceous Green, according to its various Ways of Application, as appears from *Galen*, in many Places. Thus, in the Passage *Prorrhet. 2. ἔσθ' παχὺ καὶ χλωρόν*, "the Urine thick and pale," approaching to white, χλωρόν is put instead of ὀχρόν, "pale." *Celsus*, *Lib. 2. Cap. 7.* renders it, *Urinam viridem*. In *Coac. ἔλκεθ' χλωρόν γινόμενον*, "an Ulcer turning Chloron," is condemn'd. It is to be observed, that χλωρόν, in *Progn.* is express'd by ὀχρόν, "pale." Again, *Aph. 3. Sect. 5. Lib. 6. Epid. χλωρεῖ*, apply'd to γλώτται, (Tongues) means the same as ὀχρεῖ, that is, yellow and pale; or, as *Galen*, *Comment. 5. in Lib. 6. Epid.* explains the Word, ὑπὸ τῆς ὀχρῆς χολῆς βαπτόμεναι, "tinged with pale Bile." *Celsus*, *Lib. 2. Cap. 8.* renders χλωρόν πύον, in *Hippoc. Progn.* by *Pus pallidum*, as do almost all Interpreters, meaning by *pallidum* the same as *luteum*, "a pale Yellow;" or rather, as they endeavour to prove, what, in *Latin*, is properly call'd *galbum*, that is, a pale Colour, betwixt Yellow and Green. χλωρός also means a green or herbaceous Colour; for, in *Asia*, as *Galen* writes, *Com. 2. in 6 Epid.* Greens, Trees, and Plants, are call'd χλωρόν, and Cattle, when turn'd to feed on Grass in Spring, are said χλωρόζων. But χλωρός, spoken of Man, signifies a pale Green, or a Green a little inclining to Black, like the Colour of Cabbage or Leeks, and is what *Hippocrates*, *Progn.* condemns in a cadaverous Face; on which *Galen* writes, that the worst Change of Colour is to a Black, but more moderate when alter'd to a χλωρόν, by which Epithet the Antients sometimes intended a pale Colour, sometimes that Colour which the Vulgar mean when they call Cabbages and Lettuces χλωροί, which is a Colour blacker than a Red, and a sort of Introduction to a Black and Livid, being the Effect of Cold as well as the Black. Thus *Galen*,



*Galen, Com. 1. in Progn.* says, that *χλωρόν* sometimes signifies Pale, sometimes a sort of Green, as when we call Cabbage *χλωρόν*. Again, *Com. 2. χλωρόν*, he says, has a double Signification; under the first, it imports a Mixture of much pale Bile; the second implies a Mixture of æruginous Bile: And, *Com. in Prorrh.* on these Words, *ἐν τῇ χλωρῇ σῆψις ἐπεγενέσθαι*, "putrid Matter was voided at the Mouth, which Matter was *χλωρόν*," he says, Things of a pale and green Colour are call'd *χλωρόν*. It is to be observed, that when *χλωρόν* signifies Green, it is spoken of Things recent, not dry; and is apply'd to leguminous Plants before they are dry, or yet come to Perfection, as *Galen* observes on the Words *ὅσπερ χλωρόν*, in *Hippoc. R. V. l. A.* So *χλωρόν* *εἶας*, *Lib. 1. περὶ γυναικ.* is recent Fat; and *χλωρόν* *δέος*, in *Homer*, is a new Fear or Terror.

CHLOROSIS, *χλωρόσις*, from the preceding Word.

*P. Hoffman*, and most Authors, treat a *Chlorosis* as a Species of Cachexy. It properly signifies that Disorder, which Virgins fall into, for want of a due Menstrual Discharge; which we, preserving the Analogy of the Greek Name, call the *Green-sickness*. See CACHEXIA.

By a *Cachexia* we understand a depraved and tumid State of the Body, attended with an unseemly and disagreeable Colour of the Skin. As this Disorder arises from a Redundance of peccant Serum, and a preternatural Weakness of the Tone of the Viscera, it of course remarkably disturbs and impairs all the several Functions of the Body.

The genuine and most distinguishing Characteristics of this Disorder, are these following: A whitish-pale Colour of the Skin, somewhat upon the green or the yellow Cast; a pretty full and tumid State of the Body, which appears cold and soft to the Touch, and is at the same time infirm and feeble. The Patient is afflicted with a Weakness of the Legs, a Difficulty of Breathing, especially in ascending Stairs, a Swelling and Inflation of the Feet, a Torpor, and Inactivity of Mind, an Oppression during Sleep, a Swelling of the Eyelids, a slow and soft Pulse, together with a white and turbid Urine.

Tho' the Name of this Disorder seems to have been unknown to *Hippocrates*, yet, in the thirty-fourth and fifth Paragraphs of his Book *De intern. Affection.* he not only makes evident Mention, but also gives a pretty full Description of it. But, among all the antient Physicians, *Cælius Aurelianus* and *Aretæus* have most accurately enumerated the peculiar and distinguishing Symptoms of this Disease, and assign'd their respective and adequate Causes. The former of these Authors, in the sixth Chapter of his third Book, uses the following Words:

"A Cachexia, or bad Habit of Body, arises either from the  
"Intemperance of the Patient, the unskilful Management of  
"the Physician in previous Disorders, a slow Recovery after  
"Diseases, Purgatives too often exhibited, a stony Hardness  
"of the Liver or Spleen, hæmorrhoidal Discharges, or Fevers  
"long protracted, Collections of purulent Matter, Vomiting  
"after Supper, and other Circumstances of a like Nature.  
"This Disorder is often the antecedent Cause of a Dropsy, or  
"of Eruptions and Spots on the Surface of the Body. The  
"Colour of cachectic Patients is pale and whitish, and some-  
"times livid. The Patient, in consequence of his Weak-  
"ness, is languid, slow, and inactive, and labours under an  
"œdematous Inflation. Some Patients are afflicted with a  
"Flux, accompanied with a gentle Fever, for the most part  
"latent, and which is exasperated towards Evening. The  
"Pulse is frequent and tense, the Food loath'd, and Wine  
"more eagerly coveted than at other times. The Urine also  
"is bilious, and the Veins distended."

*Aretæus*, in the sixteenth Chapter of his first Book *Chronic.* describes this Disease in the following manner: "Cachectic  
"Patients are afflicted with a Littlefness, and Sense of Weight  
"all over their Bodies: They become pale at certain Inter-  
"vals. Their Abdomen is distended with Flatulences, their  
"Eyes hollow, their Sleep disturb'd, and follow'd by a Torpor.  
"In their Abdomen, and all the other Parts of their Body,  
"the natural Heat is weak and languid. Their Mind is de-  
"jected, and unqualified for the due Exercise of any of its  
"Powers. A pruriginous Sweat breaks forth on their Bodies;  
"they breathe slowly, and their Pulse is languid, weak, and  
"frequent. The Disease is generally protracted for a long  
"time. Digestion is slow and weak. This Disorder arises  
"from a Suppression of the hæmorrhoidal Discharges, or of  
"accustom'd Vomiting, or from giving over such Degrees of  
"Exercise and Labour, as the Patient has formerly been ac-  
"custom'd to."

What is call'd a Cachexia in general, in Girls, before an Eruption of the Menstrua, or in whom they flow too sparingly, comes under the Denomination of *Chlorosis*, which is also styl'd the *Virgins Disease*, and the *white Fever*. Concerning this *Hippocrates* principally treats in his Book *de Virginum morbis*; and it is, in reality, no more than a Species of Cachexy, since it discovers itself by the same Signs; for the Patient's Face becomes pale, and sometimes yellowish. There is an uncom-

mon Paleness of the Lips. The Eyes are sunk, the Eyelids livid, and all the Members of the Body are seiz'd with a Lassitude. The Patient is also seiz'd with a Torpor of Mind, a Coldness of the Feet, a Heaviness, and Aversion to Motion, a Loss of Appetite, a Nausea, and Vomiting, turbulent Sleep, and a languid Pulse. The Urine discharged is also aqueous, and without Colour, but, in Process of Time, becomes turbid. This Disorder is also frequently attended, especially in ascending Stairs, with a Difficulty of Breathing; together with a Tremor and Palpitation of the Heart. A Swelling and Inflation of the Feet, Cardialgias, intermitting Head-achs, and fainting Fits, are sometimes also the concomitant Symptoms of the Distemper.

As to the immediate Cause of this Disease, and its several Symptoms or Accidents, it seems to consist in too great a Quantity of impure Blood, and of viscid and less spirituous Humours, collected in the Body, in consequence of the natural Tone, Vigour, and Strength of the solid Parts, especially of the Viscera subservient to Chylification, Sanguification, and Depuration, and of the Fluids, being considerably impair'd and weaken'd.

For, by reason of a Want of due Tone and Elasticity in the fibrous and vascular Parts, the Circulation of the Blood becomes more slow and languid: Hence the Secretions and Excretions, on the due State of which Health depends, are impair'd. By this means the excrementitious, viscid, bilious, saline, and serous Sordes, which ought to be evacuated, after their Secretion in the Liver and Kidneys, being in a great measure retain'd, render the Serum of the Blood, and the nutritious Juices, highly impure and peccant. In Process of Time the moving Fibres of the subcutaneous perspiratory Vessels are, in like manner, deprived of their due and natural Strength; by which means these Sordes are less successfully convey'd thro' the cutaneous Pores. Hence a pale-greenish or yellowish Colour of the Skin, accompanied with a certain Swelling of the Body, arises from a tinged Serum lodg'd in the reticular Substance, between the Skin and Cuticula, and the Nutrition of the Patient is entirely depraved. And since, under so peccant a State of the Blood and Humours, that subtle nervous Fluid, which by the Antients was call'd *Nature*, and by the Moderns the *Animal Spirits*, and which conveys Vigour and Elasticity to the solid Fibres, and presides over the Animal Functions, is no longer supplied by a pure and duly qualified Blood and Lymph, but by such as are contaminated with a large Quantity of aqueous, viscid, and vapid Sordes, this Fluid must of course contract a considerable Taint, and have its Power and Energy both over the vital and animal Actions, remarkably impair'd and diminish'd. Hence 'tis not surprising, that this Disorder should be accompanied with an amazing Complication of Symptoms, such as an uncommon Sense of Weight, and Languor of the Body, Loss of Appetite, Drowsiness, Dejection of Mind, and Torpor of the Senses.

A naturally lax and spongy Habit of Body, which consists in the Softness of the moving Fibres, the Smallness and Number of the Vessels, and the Slenderness of the Tendons, above all other Things, lays a Foundation for this Dyscrasy of the Blood and Humours, and the Cachexy arising immediately from it: For this Reason we observe, that Women are more subject to this Disorder than Men; and that it is more incident to Men of a sanguine and phlegmatic Constitution, than to others of a different Habit; for the sanguine and phlegmatic Habit is highly fit for generating a Redundance of Blood and Serum; and because, in Patients of this Kind, the Blood circulates slowly, it becomes thicker, more viscid, and fit to obstruct the small excretory Ducts, especially those of the Liver.

According to *Aretæus*, in the before quoted Passage, whose Authority is back'd in this Particular by daily Experience, an indolent State of Life, and a total Cessation from customary Labour and Exercise, may be justly reckon'd among the procatartic Causes of this Disorder; because they contribute very considerably to the too plentiful Generation, to the Impurity, to the slow Circulation, and to the Stagnation of the Humours; as also to the Obstruction of the Vessels subservient both to Sanguification, and the Depuration of the Juices. These Misfortunes happen the more readily, if Aliments, especially of the inflating viscid Kind, sweet Meats, acid Substances, and such as are with Difficulty digested, are taken in a larger Quantity than the weak and exhausted State of the Patient is able to bear, digest, and convert into an useful and salutary chylous Juice: Hence arise large Quantities of acid and viscid Crudities, which prove the first Foundations of Impurity in the Mass of Blood; for that Proverb is no less just than common, That *an Error of the first Concoction*, which is perform'd in the *Primæ Viæ*, is not easily rectified in the second, which is perform'd in the Viscera subservient to Sanguification, and the Depuration of the Juices; much less in the third Concoction, which consists in the immediate Act of Nutrition.

An improper Regimen, with respect to Drinking, variously disposes both Women and Men to this Disorder; for Women generally



generally drink little, and sometimes scarcely once in a Day. Now, in consequence of the daily Excretions carried on in their Bodies, a large Quantity of Fluids is carried off from the Mass of Blood and Humours. Unless this be restored, and supply'd afresh, the Humours necessarily, and of course, become thick, unfit for circulating freely thro' the capillary Vessels, and disposed to form Infarctions and Obstructions, which are the genuine and immediate Causes of a *Chlorosis*. At present the liberal Use of rich Coffee is the principal Cause of a *Chlorosis* in some Women, who, neglecting Exercise, or being habitually costive, drink it daily with large Quantities of Sugar; for by this means the Blood, already too thick, is impregnated with many sulphureous, hot, and oleous Particles; and, unless there is a sufficient Secretion of these Particles, along with the Bile, thro' the excretory Ducts of the Liver, both the Quality and Colour of the Lymph must necessarily be changed. Nor, in my Opinion, is there a Necessity for assigning any other Reason, why scorbutic purple Fevers rage so frequently in our Days. Men, on the contrary, transgress by drinking too large Quantities of spirituous Liquors, Wines, and strong Ale, which, instead of rendering the vital Juices sufficiently thin and liquid, rather coagulate them, and by that means contribute very much to the Production of this Disorder.

A depraved, and more especially a cold and moist, State of the Air, contributes not a little to the Production of this Disease; since, either by constricting or relaxing over-much the Surface of the Body, it obstructs the salutary Work of Perspiration, and by that means increases, at once, the Quantity and the Impurity of the Humours: Hence also we frequently observe this Disorder produced by the long Continuance of a cloudy and turbid State of the Atmosphere, especially when the Winds blow from the West. It is also more frequent in the Spring and Autumn than in any other Season, and may be produced by living in moist or marshy Places; as also by lodging or sleeping in dank and low Rooms.

A Way is also paved to this Disorder by the Passions of the Mind; the Influence and Power of which are so great, that by acting immediately on the nervous Parts, especially the Stomach and Intestines, which are entirely nervous and membranous, they considerably impair and weaken the peristaltic Motion, and natural Functions, of these Parts. Violent Terror, long Grief, or suppress'd Resentment and Wrath, have a most direct Tendency to induce a Cachexy, or Chlorosis, because they either too much increase, or retard and stop, the critical Evacuations of Blood, whether of the menstrual or the hæmorrhoidal Kind.

Both daily Experience, and the Authority of skilful Physicians, confirm, that a Diminution of the otherwise salutary and critical Evacuations of superfluous Blood, whether by the Anus, or the Uterus, proves the principal Cause, not only of a Cachexy in Men, and a Chlorosis in Women, but also of other very formidable and almost incurable Disorders; for when the Blood is denied its usual Passage thro' these Ways, either by means of Spasms, or a preternatural Infarction of the Parts by thick and viscid Humours, it stagnates, becomes vitiated, is corrupted, and regurgitates to the larger Vessels and Viscera, by spoiling the Tone and Functions of which, it often excites various and violent Symptoms in the more remote Parts. This Disorder, incident to young Women about the Time of Puberty, derives its original Cause only from an Obstruction of this Evacuation. This is beautifully accounted for by *Johannes Langius, in Epist. Medicin. Lib. 1. Ep. 21.* in the following Words: "At that Time, by the Influence and Instigation of Nature, the menstrual Blood flows from the Liver to the Cavities and Veins of the Matrix. When this Blood cannot force its Passage, either on account of the narrow Mouths of these Veins, which are also obstructed by viscid Humours, or on account of its own Thickness, it again regurgitates to the Heart, Liver, Diaphragm, and Veins of the Præcordia, thro' the Ramifications of the Vena Cava, and great Artery; a large Quantity of it is also convey'd to the Head; and hence violent Symptoms about the Viscera, such as a Difficulty of Breathing, a tremulous Motion of the Heart, an Inflation of the Hypochondria, a Loathing of the Aliments, and a Cardialgia." These Symptoms seize not only Virgins, and young Women, but also married Women, and those pretty far advanced in Years, at the Time when, according to the general Laws of Nature, the monthly Evacuation ought to cease; or when, from any other Cause, it is stop'd. In Men also a Suppression of the hæmorrhoidal Discharge, which, by destroying the Strength and Tone of the Parts, fills the Vessels with a Redundance of depraved Juices, contributes not a little to the Production of a Cachexy.

After enormous Hæmorrhages, whether from the Uterus, the Anus, or accidental Wounds, nothing is more common than the Production of chronical and highly obdurate Diseases, such as a Cachexia, a Leucophlegmatia, an Anasarca, œdematous Swellings of the Feet, or an Atrophy, attended with a preternatural Languor, and Loss of Strength; for as the Functions of all the Parts, when perform'd according to the due

and stated Order of Nature, depend upon a proper Quantity of well qualified Blood, and its free Circulation thro' all the Vessels, and derive their Strength and Vigour from these Circumstances; so it must naturally and necessarily follow, that, when this vital Fluid is almost exhausted, the solid Parts and Viscera must be remarkably weaken'd, and their Functions considerably impair'd and diminish'd. But no Parts are so much, or so immediately, affected by this Misfortune, as the Stomach and Intestines. The Weakness and Want of a due Tone in which, impairs the Digestion, and, in consequence of the corrupted Aliments, creates Crudities, which, passing into the Blood-vessels and whole Habit of the Body, not only render Nutrition imperfect and vitious, but also remarkably prejudice and prevent a due Discharge of the Functions, which ought to be perform'd by the several Viscera subservient to Sanguification, and the Depuration of the Juices, such as the Liver, Spleen, and Kidneys. When the Quantity of Blood and Humours is too scanty, it also happens, that the small and capillary Vessels, especially those subservient to the Secretion of the laudable and useful, and the Excretion of the vitious and peccant Juices, become impervious, collapse, or have their Diameters lessen'd, in consequence of which their Functions are highly impair'd, a Circumstance which proves the fruitful Source of Impurities.

Nor do I think any other Reason can be assign'd, than too great a Loss of good and laudable Blood, why those Patients in a particular manner, who, not being fully recover'd from chronical Diseases, especially Fevers and Dysenteries, but as yet remaining weak, eat a larger Quantity than the languid Action of the Stomach can digest, and convert into a laudable Chyle, are so much subject to Cachexies. This Disorder also, according to the Dictates of Experience, and the joint Authorities of the most antient Physicians, frequently happens to those who are too much weaken'd by the imprudent and preposterous Cure of Diseases; such as those perform'd by the Use of drastic Purgatives, or even the Use of Astringents for stopping violent Hæmorrhages, and suppressing the Paroxysms of Fevers; for these Medicines are absolutely of the worst and most pernicious Quality, which too much exhaust the Strength, in which the whole Energy of Nature is lodg'd. Among this Number we may justly reckon the drastic Evacuants, and such Medicines as constrict and block up the capillary Vessels subservient to the Excretion of the peccant, and the Depuration of the laudable Juices; since, by the Use of these Medicines, ignorant and unskilful Physicians often bring on not only a Cachexia, but also other Disorders, which prove as fatal to the Patients.

Because there is a great Affinity betwixt a Cachexia and other Diseases, we shall inquire wherein they agree, and in what respects they differ. First, then, we must observe, that a Cachexia does not much differ from a Chlorosis, and a Fluor Albus, with respect to its Nature, but only with respect to the Sex of the Patient, and the Seat of the productive Cause, which in Men is lodg'd in the Stomach and Liver, but in Women is to be sought for in these two Organs, and the Uterus, at the same time. Nor is there a less considerable Agreement between a Cachexia and a Cacoehymia, since the latter, as well as the former, supposes a large Quantity of impure Juices in the Vessels; only these arise rather from Intemperance, and a Fault of the first Digestion, than a deprav'd State of the other Viscera, which remain in their natural Condition. Hence, from a violent Cacoehymia, which consists in a deprav'd Nutrition, a Transition is at last made to a Cachexy. We must also observe, that every pale and unseemly Colour of the Countenance is not to be taken for an infallible and essential Characteristic of a Cachexy; since such a State of the Countenance often remains after violent Diseases; or arises from a Collection of peccant Humours in the Primæ Viæ, or from a Suppression of Anger, or from Spasms of the Stomach; but in these Cases the Disorder easily yields to proper Remedies. A Cachexia also bears a near Resemblance to a Jaundice; for both Disorders are accompany'd with a deprav'd Nutrition, a pale Colour of the Skin and Countenance, a Loss of Strength, a Torpor of Mind, together with a Weakness and want of due Tone in the Stomach and Viscera: Yet there is this Difference, that in a Jaundice these Symptoms draw their Origin from the Bile alone, regurgitating to the Mass of Blood, in consequence of the biliary Ducts being either obstructed, or spasmodically constricted; whereas, in a Cachexia, the Stomach, Spleen, Liver, and Kidneys, are at once severely affected, so that when this Disorder is violent, it degenerates into a black Jaundice, unless due Care be taken to prevent that unlucky Catastrophe by a seasonable Cure. A Cachexy is also different from an Anasarca and Leucophlegmatia, since in these there is a greater Inflation and Hardness of the inferior Parts, and after the Impressions of the Finger, Pits remain, which does not happen in a Cachexia, except when it approaches to a degree of these Disorders. Nor are we to forget and overlook the Difference between a Cachexia and an Atrophy; for in both Diseases the Fluids are highly impure, the Viscera are depriv'd of their due



Tone, and the Nutrition is vitiated. But in an Atrophy the Body is daily more and more extenuated, and the Nutrition is entirely destroy'd; whereas in a Cachexy it is vitiated, but preternaturally copious: Hence the Body in a Cachexia becomes larger than it was in its natural State. Lastly, a Cachexia is different from a Scurvy; for in every Scurvy there is a Cachexy, and an almost irreparable Dyscrasy of the Humours, observable from the various Pains, Exulcerations, and Defections of the Skin; but in a Cachexy this Dyscrasy of Humours does not arise to such a Height. And if these Symptoms should happen to attend a Cachexy, it is call'd a scorbutic Cachexy.

As for the Prognostics of a Cachexy, I think we may lay it down as an uncontroverted Maxim, that cachectic Patients differ very considerably from each other; and are more or less easily cur'd, according to their Age, their Constitution, their Method of Life, and the greater or less Fault of their Humours and Viscera. Thus, if we consider the different Ages of Patients, old Persons are more severely afflicted with this Disorder, than such as are young, because old Age itself is a Species of Cachexy; so that Patients, labouring under a Cachexy at this Period of Life, frequently fall into an Atrophy and Marasmus. That Species of Cachexy, which is suddenly produced by Intemperance, and a deprav'd Digestion, after chronical Diseases, is more easily remov'd, than that which makes gradual Advances in consequence of a Fault of the Viscera, or a scirrhus Obstruction of the Liver or Spleen. Hence also a greenish, or somewhat blackish Colour of the Skin, which, for the most part, indicates a latent Injury done to the Viscera, by an Admixture of corrupted Bile, prognosticates a greater Danger than a pale Colour, which only indicates an Abundance of Phlegm. We must also observe, that the longer the Disease has afflicted the Patient, the greater Difficulty of Breathing it is accompanied with, the more tense and hard the Hypochondria are, and the more the Strength is impair'd; especially, when the Patient is seiz'd with fainting Fits at certain Intervals, the Danger is proportionably greater. Nor does this Disorder admit of an easy Cure, when it draws its Origin from a preceding, or a frequently returning, hæmorrhoidal Discharge. Besides, there is no Disease which more readily degenerates into an Anasarca, an Ascites, an Atrophy, and a hectic Fever, than a Cachexy; especially when, in the Beginning, due Care is not taken to remove it by proper Remedies. A Chlorosis, when skilfully treated, is neither very dangerous, nor of long Duration; but is either remov'd by a seasonable Return of the menstrual Discharge, or, in Virgins, happily cur'd by Marriage alone. But Women who labour long under a Chlorosis, either become barren, or bring a weak and languid Offspring into the World.

#### The Cure.

Having now investigated the Causes of this Disorder, we shall next lay down a proper Method of removing them, which, in my Opinion, consists in the following Intentions: First, to correct the crude, thick, and impure Blood and Juices; to evacuate them thro' proper Emunctories; and, in their stead, to promote the Generation of a fine Blood and Chyle: Secondly, to open and remove the Obstructions of the Viscera and capillary Vessels, that a free and equable Circulation of the Blood may be restor'd thro' all the Parts of the Body, both internal and external: And, thirdly, to corroborate and restore the weaken'd Tone of the Stomach and Intestines.

But before the Physician attempts the Correction of the peccant Humours, he is to endeavour to cleanse the Source, from which such an Increase or Addition is deriv'd to the Humours. The Stomach then, and Intestines, constitute this Source, from which viscid, mucous, and acid Crudities proceed, and which, by incisive and digestive Remedies, ought to be corrected and disposed to Motion, that they may be eliminated with the greater Ease. This Intention is most effectually answer'd, by what we commonly call neutral Salts; such as vitriolated Tartar, the Arcanum Duplicatum, a Solution of Crabs-eyes in Lemon-Juice, the Terra foliata Tartari, otherwise call'd *Tartarus Regeneratus*, Sal Polychrestum, the Caroline and Egran Salts. *Tartarus Tartarifatus*, or Salt of Wormwood, may be us'd; these must be dissolv'd in a sufficient Quantity of Water, and exhibited; for these, often repeated or exhibited in a large Dose, not only incise and attenuate, but also prove purgative, and effectually evacuate the Sordes lodg'd in the Intestines. If they should happen not to answer this Intention, Evacuants are to be us'd, which may be prepar'd of equal Quantities, half a Dram, for Instance, of Myrrh, Gum Ammoniac, the Extracts of Rhubarb, Wormwood, Cinnamon, and the Panchymagogum Crolli, Amber, and the Salt of Amber; a Scruple of this may be exhibited for a Dose. This Intention is also excellently answer'd by my balsamic Pills, which, at the same time, wonderfully restore and strengthen the weaken'd Tone of the Stomach. Or if a Medicine in a

liquid Form is more agreeable, an Infusion in Wine may be prepared of the Roots of Burnet, wild Radish, Succory, Rhubarb, Agaric, fresh Orange-peel, the Tops of the lesser Centaury, Cream of Tartar, and Currants. A sufficient Quantity of this Infusion is to be taken every Morning for ten Days. This Intention is no less effectually answer'd by half a Pint of the *Sedlitz Waters*, drank every other Day, with an Ounce of the Syrup of Peach-flowers, or the Syrup of Succory with Rhubarb, or the solutive Syrup of Roses. If the Patient is too costive, it is adviseable to render his Body soluble by a gentle evacuant Potion, which may be prepared in the following manner.

Take of the best Manna, two Ounces; Cream of Tartar, one Dram; Rhubarb and purified Nitre, each half a Dram: Mix them in eight Ounces of Spring-water.

When the *Primæ Viæ* are thus purg'd, the Physician must endeavour to render the whole Mass of Blood more pure and fluid, and to open the obstructed Emunctories, that the Blood and Serum may be the more effectually depurated. This Intention is answer'd by Decoctions of the Roots of Sarsaparilla, *China*, Vipers Grass, and Succory, as also by Decoctions of the Shavings of Sassafras and Cinnamon. These Decoctions are to be us'd weak for common Drink, but may be exhibited pretty strong in Bed every Morning, in order to promote a free and brisk Perspiration. It is also proper sometimes in the Morning to promote a Diaphoresis, which may be obtain'd, by taking forty Drops of the Essence of Amber and Burnet, with Tincture of Antimony and Spirit of Hartshorn, mix'd in equal Quantities in a warm Decoction. Nor will it be improper, if the Case requires it, now-and-then to exhibit a Dram of the Tincture of Tartar in a proper Decoction, in order to excite a Diuresis.

But, above all Things, a particular Regard is to be had to the State and Condition of the Stomach, for restoring the Tone of which, the Stomachic Elixirs are, of all other Medicines, the most proper. The principal of these are, my balsamic Elixir, mentioned in the *Notes to Poterius*; Sal volatile Oleosum, mix'd with Tincture of Tartar; the Stomachic Elixir, consisting of the Essences of Gentian and fresh Orange-peel; the balsamic Elixir, prepar'd of the Extracts of the lesser Centaury; *Cardus Benedictus*, Wormwood, Gentian, Myrrh, Amber, Saffron, and fresh Orange-peel, prepar'd without a spirituous Menstruum, but with a weak Lixivium of the Salt of Tartar. These Medicines, us'd at Meals, or immediately after them, contribute much, not only to digest the Aliments, and procure a balsamic and spirituous State of the Chyle, but also to restore the natural and balsamic Quality of the Juices, and strengthen the Tone of the Viscera. But, for answering these Intentions, 'tis necessary they should be us'd for a considerable time.

If the Disorder is so highly obstinate, as not to yield to these Medicines, we must have recourse to proper mineral Waters, which are of singular Service in the Cure both of a Cachexia in Men, and a Chlorosis in Women. But this Intention I think is, among all others, most effectually answer'd by the *Pyrmont Waters*, by the Use of which, I have often known a Chlorosis, arising from an Obstruction of the Menfes, cured in Patients, apparently of a very weak and tender Constitution. The *Sparo Waters* are possess'd of the same Virtues; for since both of them are impregnated with a fine chalybeate Principle, they not only render the thick Juices fluid, and fit for Motion, and open the obstructed Ducts of the Emunctories, but also, by increasing the Tone and Strength of the Viscera, excellently promote the Circulation of the Blood thro' all the Parts of the Body.

Besides the above-mentioned Waters, which are richly impregnated with a chalybeate Principle, other chalybeate Medicines, in Conjunction with saline and balsamic Ingredients, when duly exhibited, are justly esteemed efficacious and powerful Remedies for the Cure of a Cachexia and Chlorosis. But tho' there are various Preparations of Steel, both of the chymical and pharmaceutical kind, yet none seems preferable to the subtle Crocus, which is prepared of the coarse Filings, not of Steel, but of Iron, sprinkled with Rain-water, and expos'd to the Heat of the Sun. But 'tis adviseable to exhibit this Medicine mixed with others, suited and adapted to the Nature of the Disorder: For this Reason I generally add to it the Roots of Burnet and Arum, Cinnamon, Salt of Tartar and Sugar, with so much Success, that I have often seen young Women cured by it, after they have labour'd for a great while under a Chlorosis, attended with a violent Head-ach, and other formidable Symptoms. The best Medicines of a liquid Form, for answering this Intention, are the *Tinctura Martis pomata*, the *Tinctura Martis Cydoniata*, that prepar'd with Lemon-juice, and above all, the *Tinctura Martis Zwelferiana*. The Efficacy of these Medicines is still increas'd, if they are exhibited in a sufficient Quantity of the above-mentioned Decoction,



coction, or in Broths, in which the aperient Roots of Dog-grafs, Succory, Parsley, Sparrow-grafs, and Fennel, have been boiled.

#### PRACTICAL CAUTIONS.

If speedy Methods of Relief are necessary in any Disorder, they are in a peculiar manner so in a Cachexia, since by Delays 'tis to be dreaded, lest the Patient should be thrown into an Atrophy, a Scurvy, or a Dropsy. When a Patient labours under a Cachexia, arising from a Suppression of an accustomed Evacuation of Blood, the Physician is, by proper Remedies, to attempt the Restitution of that Evacuation. With this View 'tis proper, if the Patient's Strength is not exhausted by the Continuance of the Disease, to take away a small Quantity of Blood at certain Intervals, every third Day for Instance. This Method of Relief was long ago recommended by *Hippocrates*, in the third Section of his Book *de Morb. Mulier.* and is in a peculiar manner salutary to those, in whom the accustomed menstruous Discharges are suppressed. Venesection, on the other hand, is highly prejudicial to those, who, abounding with a Mass of peccant Humours, have, at the same time, but a small Quantity of Blood contain'd in their Veins.

Besides a prudent and seasonable Venesection, and proper Purging, in a Cachexia arising from an Obstruction of the menstrual or hæmorrhoidal Discharges, there is a singular Virtue lodg'd in the *Caroline Waters*, by a proper internal Use of which, I have often known these suppress'd Evacuations restor'd. But they are to be abstain'd from, when the Disorder draws its Origin from an immediate Discharge, either of the Menfes or the Hæmorrhoids.

The obstructed Menfes, when Venesection is properly instituted, and the Obstructions of the Viscera remov'd by mineral Waters, or chalybeate Medicines, sometimes begin to flow again spontaneously. But if this should not happen, it is necessary the Patients should be put, for about an Hour's Time, into a pretty hot Bath, prepar'd with the Herbs Feverfew, Baum, Mug-wort, Penny-royal, and Savin, Flowers of Roman Chamomile, and of Sage, together with Bay-berries. A Bath of this Kind I have often found highly beneficial for attenuating the stagnating Humours, and evacuating the mucous and tenacious Part of the Serum thro' the Orifices of the Uterus.

Cachectic Patients are never to be treated with violent Medicines; for which Reason, all drastic Purgatives and Sudorifics, as also immoderately hot Baths, are to be avoided, since, by their means, prejudicial Translations of the peccant Humours to the more noble Parts are often produc'd.

As to the due Use of chalybeate Preparations, we must observe, first, That their Efficacy ought to be assisted and promoted by sufficient Motion and Exercise of the Body: Secondly, The Use of them ought to be persisted in for ten or fifteen Days, interposing, at the same time, every third or fourth Day, a gentle Purgative. Thirdly, A sufficient Quantity of diluting Liquor, and an exact Regimen, are to be used at the same time.

We must observe with *Hippocrates* and *Platerus*, that, in pale and sickly Girls, the Menfes have appear'd and continued regular, from the very first Night of their Marriage, after which a lively Colour, and a perfect State of Health, have ensued; for which Reason, we must in this Case recommend Matrimony, as the best and most proper Remedy.

The Feet, which in this Disorder are cold and tumid, are to be kept well cover'd, and moderately warm. They are also to be tightly wrapt up in Linen Cloths, in order to redress their lax and flaccid State, and promote a brisker Return of the Fluids to the Heart. But, if they are become tumid to an uncommon Degree, medicated Bags, made up of Millet, Bran, and Salt, are to be applied to them. With respect to Foot-baths, we must observe, that they are not to be used when the Swelling is already form'd; in which Case, besides the already mention'd Methods, Frictions with warm rough Linen Cloths are more properly apply'd.

As to the Regimen calculated, either for a preservative or curative Intention, a moist and cold Air, as also low Chambers fill'd with dank Exhalations for sleeping in, are highly prejudicial. Among Aliments, those of difficult Digestion, such as unripe Fruits, acid Substances, and Milk-meats, are carefully to be abstain'd from. In this Disorder Water alone is prejudicial for common Drink, for which Reason it ought to be corrected with good *Rhenish* or *Moselle* Wine. But we must observe, that a Cachexia is often produced and supported by eating too liberally; for which Reason Abstinence, and a Care not to indulge the Appetite too much, are in this Case far more powerful and efficacious, than all the Medicines in the Shops. *F. Hoffman.*

What *Hoffman* has said of the *Sparw* and *Pymont Waters*, holds true of our own chalybeate Waters, from which I have always observ'd greater Effects, when drank at the Fountain Head, with due Exercise, than from the *German Waters* drank at a great Distance from the Spring. See *CACHEXIA*.

**CHNUS**, χνῆς, in *Hippocrates*, *Lib. 1. περὶ γυναικ.* is fine or soft Wool, to which he compares an aqueous Spleen, on account of its Softness. χνῆς, or χνός, in *Hesychius*, is interpreted Chaff, and also Sound and Noise; in which latter Sense we may understand the Word in *Lib. de intern. Morb.* where it is said, that, in a Phthisis, ὁ φάρυγξ χνός πίμπλαται, ἢ σείζει ὡς διὰ καλάμῃ, "the Fauces are fill'd with Sound, and utter "a sort of hissing Noise, as if it came through a Reed." But χνός here may well enough be taken in its former Sense, as *Castellus* observes, and import, that the Fauces seem to be stuffed and clogg'd with a woolly Substance, in such a manner as to make the Sound before described.

**CHOA**. See **CHUS**.

**CHOACUM** *Emplastrum nigrum*. The black Plaister call'd *Choacum*, or *Choacon*, in *Celsus*, *Lib. 5. Cap. 19.* is composed of Spuma Argenti and dry Rosin, of each an hundred Drams; but the Spuma Argenti must first be boiled in a Pint and a Half of Oil.

**CHOANA**, χόανη, is a Cavity in the Brain, like a Funnel, call'd also πύλας. *Castellus*. See **INFUNDIBULUM**.

**CHOANOS**, χόανος, χόανον, χώνος. This last, in *Hippocrates*, signifies a Funnel. Thus, in his Book *De Corde*, he says, that the σίμαχος, "the Gula," serves as a χώνος, "a "Funnel," to receive whatever we please to put into it. χόανος, χόανον, signify a Vessel of white Clay, used by Goldsmiths and Chymists in the Fusion of Metals; we may call it a Furnace for melting or casting of Metals. This appears from *Homer*, and his Commentators; and *Hippocrates*, in the Book before-mentioned, speaking of the Auricles of the Heart, compares them to the Bellows, which Smiths adapt, χόανοισι, "to "their Forges."

**CHOCOLATA**, **SUCCOLATA**. Chocolate. See **CACAO**.

**CHOCUS**. See **CHUS**.

**CHENICIS**, χονικίς, χονίκιον. The Trepan, so call'd by *Galen* and *Aegineta*, and mention'd by *Celsus*, *Lib. 7. Cap. 3.* where he calls it **MODIOLUS**.

**CHENIX**, χόνιξ. An *Attic* or *Greek* dry Measure, containing three Cotylæ, or Heminae, according to *Cleopatra*, that is, one Sextarius and a Half.

**CHERADES**, χερᾶδες, from χερᾶς, a Swine. The same as *Strumæ*. See **STRUMA**.

**CHERADOLETHRON**, χερσδολέθρον, from χερᾶς, a Swine, and δολέθρον, Destruction, that is to say, Hogbane. A Name in *Actius* for the *Xanthium*, or *Loufeburr*.

**CHOIRAS**, χερᾶς. The same as **STRUMA**, which see.

**CHOIROS**, χοίρος, ἢ χοίρεος. *Galen*, *Com. in R. V. l. A.* says, that the Antients call'd by this Name particularly χείρον τὰ μικρὸν λίαν, "a very little Hog."

**CHOIAC**. The Name of the Month *December* in *Actius*, *Tetr. 3. Serm. 4. Cap. 48.*

**CHOLAGOGA**, χολαγωγὰ, among the *Greeks*, corresponded to what we call *Cholagogues* in *English*. The Medicines of this Class were so call'd from χολή, the Bile, and ἄγω, to drive out or evacuate. By Cholagogues the Antients meant no more than such purgative Medicines as expell'd the internal Faeces, which resembled the cystic Bile in their yellow Colour, and other Properties, such as their Brightness, their Tenacity, and their Bitterness; but they seem to have err'd, first, because by this means they excluded many things from the Class of Cholagogues, which really belong'd to it; for the hepatic Bile, before it is mixed with the cystic, in every respect resembles Lymph. Secondly, because they accounted some things Cholagogues, which were not really such; because many other Medicines discharge Faeces with the above-mention'd Properties, tho', at the same time, the smallest Quantity of Bile is not contain'd in them; such as Cassia, Manna, Aloes, and Tamarinds, by which the Faeces are tinged with a yellow Colour. It may justly be doubted, whether there really are such purgative Medicines as act in a specific and particular Manner upon the Bile; for, according to *Etmuller*, Purgatives act as well upon the useful as the peccant Fluids of our Bodies, and one Purgative is just as good as another: However, according to the various Circumstances, we are taught by Experience to choose sometimes one, sometimes another; sometimes one which is weak, and at other times one of a more strong and drastic Nature. Hence we understand, that not only Cholagogues, but also other Purgatives, evacuate Bile. We may, however, retain the Name Cholagogues for such Purgatives as are generally used against Disorders or Obstructions of the Liver and biliary Ducts; in Students, for Instance, and Men of a sedentary Life, in the Jaundice, sometimes in Fevers, in a corrosive and burning Pain of the Intestines arising from an acrid Bile, and in Loss of Appetite, arising from a pinguious Bile. *Actuarius*, in his *Meth. Medend.* tells us, that such Substances as evacuate yellow Bile are to be used in Cases where such a Species of Bile is suspected to be lodged in the Mouth of the Stomach, or dispersed through the System of the Veins; in tertian Fevers also, and those of the continued Kind, when decreasing; in the Jaundice; and, in a Word, in all Disorders in which a Redundance of yellow Bile



is suspected. The Medicines evacuating yellow Bile are commonly reduc'd to two Classes. Under the first are contained such things as, by attenuating the hepatic Blood, promote a more free and copious Secretion of the Bile; such as the sweetish acid Juices of ripe Fruits, the Juice of that Species of *Lychnis* call'd *Saponaria*, *Cassia*, *Honey*, *Tamarinds*, Juice of white *Roses*, *Aloes*, *Scammony*, *Myrobalans*, *Rhubarb*, *Soaps*, especially those consisting of a volatile alkaline Salt, and a volatile Oil, *Elixir Proprietatis*, moderately aromatic Syrups, such as *Fernelius's* Syrup of *Mugwort*, the Syrup of *Jerusalem Oak*, that of the Five aperient Roots, that of *Violets*, the simple Syrup of *Succory*, the same with *Rhubarb*, the simple solutive Syrup of *Roses*, the same with *Sena*. These must be exhibited in *Whey*, *Decoctions of Dandelion*, or some other Decoction of a diluting Nature, in the Morning, upon an empty Stomach. Perhaps the best Cholagogue belonging to this Class is what is prescrib'd by *Boerhaave* in his Chymistry, and which is prepared

Of two Drams of the Tincture of *Scammony*, well prepar'd with rectify'd Spirit of *Wine*, and mix'd with triple the Quantity of some of the above-mention'd Syrups.

The second Class contains such Substances, as, by giving a violent Concussion to the Abdomen and Diaphragm, derive both Species of Bile into the Intestines. This Effect is produced by the more drastic Vomits and Purgatives, which ought not to be used till after the former have been try'd, and which are to be calculated for the Cure of Diseases arising from black Bile.

There is some Reason to suspect, that antimonial Medicines act more powerfully on the Bile than any other Remedies.

**CHOLAS**, *χολάς*, rendered by *Gaza Cholago*, from *Aristotle*, *Hist. Animal. Lib. 1. Cap. 13.* signifies all the Cavity of the Hypochondria, or the Ilium, and is so call'd because it contains the Liver, as the Strainer of the *Chole* or Bile, or from its Hollowness, *quasi κοιλός*.

**CHOLE**, *χολή*. See **BILIS**.

**CHOLEDOCHUS**, *χοληδόχος*, from *χολή*, Bile, and *δοχμα*, to receive, is a common Epithet for the Gall-bladder, the hepatic Vessels, call'd the *πύξι χοληδόχοι*, "biliary Ducts," and the common Gall-duct, which communicates with the Duodenum. *Castellus*.

**CHOLEGON**, *χοληγόν*, *χολήγον*. The same as **CHOLAGOGUM**. See **CHOLAGOGA**.

**CHOLERA**, *χολέρα*. The Cholera. It is defin'd by *Paulus*, *Lib. 3. Cap. 39.* an immoderate Perturbation of the Belly, attended with a Discharge of Bile upwards and downwards, and proceeding from a continual Indigestion of Aliments. *Hippocrates*, *Lib. de R. V. I. A.* makes two Kinds of Cholera, the humid and the dry; but *Cholera* simply spoken, that is, without an Epithet, signifies the humid *Cholera* proceeding from acrimonious, bilious, and ferous Humours, generated of a Corruption of acrimonious Food. Thus we are told, in the said Book, that Goats Flesh generates the *Cholera*, and that Swine's Flesh is *χολώδης* (*Cholodes*); that is, as *Galen* explains it, generates the *Cholera* by its Acrimony; for, as he says, in his *Comment.* this Disorder proceeds from humid and acrimonious Aliment, which is soon corrupted, and by vellicating the Orifices of the Viscera, which communicate with the Stomach, excites and attracts a Flux of Humours from the whole Body, which is discharged in bilious and acrimonious Stools and Vomitings. The dry *Cholera* proceeds from a Collection of acrimonious and flatulent Humours in the Stomach, by which the adjacent nervous Parts are vellicated and distended, in which respect it resembles the humid *Cholera*. It is described by *Hippocrates*, in the Book before quoted, as attended with a Rumbling and Inflation of the Belly, a Pain of the Sides and Loins, and a Constipation of the Belly. In *Epid. Lib. 5.* this Disease is express'd by *τὰ χολαϊκά πάθη*, "Choleric Affections;" and, in the same Book, and *Epid. 7.* simply by *τὰ χολαϊκά*. *Celsus*, *Lib. 4. Cap. 11.* and *Lib. 2. Cap. 1.* calls this Disease *Cholera*, by Translation from *Hippocrates*, *Aphor. 30. Lib. 3.* *χολέρα*, *Lib. de Insomn.* and *Caac.* signifies also a critical Disorder of that Nature, as when we are told in the last-mention'd Treatise, that the Fever call'd *Lipyrria* admits of no Solution but by a *Cholera*; and that Women, who, before their Lying-in, are afflicted *τέρας χολαϊκό*, after the Manner, or with the Symptoms, of a *Cholera Morbus*, have an easy Travail.

## OBSERVATION I.

A certain Girl of twenty Years of Age died of a *Cholera Morbus*; and, dissecting her Body, the mammary Vessels were no where to be found, tho' the most diligent Search was made for them. Many of the Parts contain'd in the Abdomen were changed; the Bottom of the Stomach, sunk a Hand's Breadth below the spurious Ribs, was entirely deprived of the Benefit of the Omentum. Hence the Stomach being weaken'd, the Girl, whilst alive, became subject to so violent Vomitings,

that a preternatural Quantity of Blood was deriv'd to her Head; by which means the florid Colour of her Countenance remain'd after her Death. By the Violence of the Vomiting, the Ligaments of the Viscera were also broken, and the Stomach was depressed, together with the Intestines. The Omentum reached below the Stomach to the Os Ischium. The *Color* was scaled preternaturally deep; and whereas, in a natural State, it is distinguish'd by various Gyration and Circumvolutions, here, by smaller Inflexions, it resembled the Teeth of a Saw. In the Intestines there was a reddish Worm found, which sufficiently denoted the cacochymic Habit of the Patient's Body. The Spleen was swelled to double its natural Bulk, and appeared chang'd from its usual Figure to that of an oblong Globe. The *Ductus Choledechus* was divided into many small Ramifications, which, on account of their Narrowness, produced a Regurgitation of a large Quantity of Bile. Hence the troublesome and fatal Vomiting of bilious Matter had its Origin. *Th. Bartholinus, Cent. 2. Hist. 81.*

## OBSERVATION II.

In Patients who, in four Days time, have died of a *Cholera Morbus*, I have found the whole Bile of the Body evacuated, the Liver scorch'd and dry, and the Gall-bladder highly turgid; but when compress'd, the Bile neither flow'd, nor dropt out. The Duct reaching directly from the Liver to the Intestines was dilated to the Bulk of one's little Finger. By this Circumstance I knew, that the Bile was convey'd immediately from the Liver to the Intestines. *Riolanus Anthropol. Lib. 2. Cap. 10.*

## OBSERVATION III.

The large Quantity of Bile evacuated in a *Cholera Morbus*, and the Diarrhœas of Children, is acrid, and generally æruginous or green. In Patients who have died of these Disorders I always found a large Quantity of this Species of Bile in the Gall-bladder, and little or none at all in the Stomach, which is an infallible Proof, that the Bile is convey'd from the Gall-bladder to the Intestines and Stomach, in which it is not originally generated. *Diemerbrook Anat. Lib. 1. Cap. 5.* Such a tumid State of the Gall-bladder, produced by a greenish Bile of a deep Colour, I observed in a Boy of ten Years of Age, who died of a *Febris Leipyria*, attended with an Inflammation of the Liver, whose extreme Lobes were become blackish, in consequence of a preceding *Cholera Morbus*. The Gall-bladder was as large as a Hen's Egg, and turgid with a greenish olive-colour'd Bile. With the same Species of Bile the biliary Ducts were also distended; and the whole concave Part of the Liver was covered with this ill-qualify'd Bile, which, on account of its Viscidity and Toughness, had there remained.

## OBSERVATION IV.

A certain Person was seized with a sudden Vomiting, and had ten Stools. Upon dissecting his Body several Pieces of white Arsenic were found impacted in the Coats of his Stomach.

## OBSERVATION V.

In dissecting a certain Person of Distinction, we found the *Ductus Choledechus*, which naturally discharges its Contents into the Duodenum, had an Opening near the Pylorus, by which means it convey'd the Bile to the Stomach, as well as to the Intestines. From this Circumstance proceeded his Nauseas, Vomitings, and Costiveness; for Nature being deprived of the Bile, her natural Clyster, failed, in consequence of her expulsive Faculty being destroyed. Hence a *Cholera Morbus* suddenly put an End to the Life of the Patient. *Barthol. Cabrollius Observat. Anat. 6.*

There is a near Affinity between a *Dysentery*, and that Disease, which from the copious Discharge of bilious Sordes, both by the Mouth and Anus, the Greeks call *Cholera*, which *Cælius Aurelianus* calls *Fellisua Passio*, and which, by *Willis*, in *Pharm. Rat. Part. 1. Sect. 3. Cap. 3.* is denominated *Dysenteria incurrenta*, or an unbloody Dysentery. It consists in the peristaltic Motion of the Stomach and Intestines being stimulated to a convulsive Contraction, by means of an highly acrid and caustic Matter, of various kinds, lodg'd in them; this Motion being in some measure inverted, and attended with an immoderate Discharge of bilious Sordes both by the Mouth and Anus.

But we must, in a particular Manner, take notice of the Difference between a *Cholera* and a dysenteric Flux, since the former is justly class'd among the most acute Disorders, and generally terminates in a few Days, at longest on the seventh; whereas a Dysentery, unless highly malignant, is found to continue for a longer time. Nor is the dysenteric Flux always attended with Vomitings, which only sometimes happen in the Beginning or Height of the Disorder, or when there is a concomitant Inflammation of the Stomach; whereas a *Cholera* is always accompany'd with a Vomiting; but it is not attended with



with so troublesome a Tenesmus, or so frequent bloody Stools; nor, lastly, does it, like a Dysentery, prove contagious.

Nor is a Cholera less different from a bilious Diarrhœa; for tho' the Causes of these Disorders are found to be nearly the same, they are, nevertheless, attended with different Symptoms, and afford different Prognostics; for as a bilious Diarrhœa is no more than a copious Discharge of bilious Sordes from the Anus, by the Force of the peristaltic Motion of the Intestines spasmodically constricted in its natural Course downwards; so, on the contrary, this Diarrhœa always attends a Cholera. But, besides, in a Cholera there is a kind of Inversion of the peristaltic Motion, but more especially of the Stomach and Duodenum, for which Reason this Disorder is always accompany'd with Vomiting.

A Cholera is also to be distinguish'd into that which is dry, and that which is moist. The former is when the Stomach and Intestines are so distended with flatulent Vapours, that with the greatest Uneasiness they discharge them copiously, either by the Mouth or the Anus. Of this Species of Cholera we have a remarkable Instance in *Æt. Med. Berolin. Dec. 2. Vol. 3.* but this kind of the Disorder does not at present come under our Consideration. The moist Cholera, on the contrary, is such a Disorder as we have described above, and is either complicated with that Species of violent and inflammatory Fever, which the Physicians call *Causus*, or is found without a legitimate and regular Fever, tho' not without some Degree of Shivering, and irregular Returns of a hot Fit. This Species of the Disease is, for the most part, idiopathic, tho' it sometimes also proves symptomatic, in the difficult Dentition of Children, according to *Sydenham*; in malignant Fevers, according to *Riverius*, in *Cent. 3. Obs. 78.* and in that Species of Fever call'd *Leipyrria*, which, according to *Hippoc.* in *Coac. Prænot. 123.* is not removed without a supervening Cholera. These Disorders are also frequently accompany'd with a bilious Flux.

Both these Disorders are incident almost to the same sort of Patients; that is, such as are of a bilious, dry, and choleric Habit of Body; for Persons of a more succulent, phlegmatic, and sanguine Constitution, more frequently labour under a pituitous Flux. Those Patients are in a particular manner subject to a Cholera, whose vital Juices are contaminated with a certain scorbutic Acrimony, or who have a Collection of acid Sordes lodged in the Primæ Viæ; such as are generally hypochondriac, scorbutic, cachectic Patients, and such as have the Misfortune of a fierce and wrathful Disposition. This Disease principally rages in the Summer-time, and during sultry Weather: It is also more frequent and violent in hot Climates, than in such as are more mild and temperate. Hence *Bontius*, in his *Hist. Nat. Ind. Lib. 4. Cap. 6.* and *Thevenot*, in his *Itinerar. Part. 2. Lib. 2. Cap. 20.* inform us, that it is endemial among the Inhabitants of *India, Mauritania, Arabia, and America.*

As to the History of the Disease, we must observe, that a Cholera generally seizes the Patient all on a sudden; for tho' acid and nidorous Eructations, pungent Pains of the Stomach and Intestines, Cardialgias, and an Uneasiness of the Præcordia, frequently precede it, yet soon after the Patient is suddenly seiz'd with Vomiting, and a Discharge of the Excrements, at one and the same time. First of all, the Remains of the Aliments are discharg'd; then bilious Humours, mix'd with a smaller or larger Quantity of Mucus, sometimes yellow, sometimes æruginous, sometimes black, and generally highly acid, and almost corrosive, together with copious Eructations and Flatulences, and sometimes Blood: These are often, and at different times, discharged. Besides, the most acute Pains, Contorsions, Corrosions, biting Pains, Inflations, and Rumbings, are perceived in the Intestines, especially above the Navel, and the Patient is at the same time afflicted with a most violent Cardialgia. As the Disorder increases, the Patient is seized with an insatiable Thirst; his Extremities become cold, his Heart begins to beat preternaturally, the Diaphragm is agitated by the Shocks of the Hiccough, the Discharge of the Urine is obstructed, cold Sweats break out on the Body, violent fainting Fits, which often partake of the Nature of a Syncope, seize the Patient, and formidable Convulsions of the whole Body are brought on. This Disorder soon terminates, for it generally ceases on the third, fourth, or, at most, on the seventh Day; nor does it ever continue longer, except when it degenerates into another Disease.

Among the Antients *Cælius Aurelianus*, and *Arætaus*, have given the most distinct Account of the Cholera.

The first of these informs us, that the Choleric Passion, according to some, receives its Denomination from *χολη*, the Bile, and *ρῶα*, or rather *ρῶδ*, a Flux, as it consists in a Discharge of the Bile from the Mouth and the Anus. Others will have its Name deriv'd from the Quantity of the Humours discharg'd, which, they say, are not real Bile, but certain Fluids, which assume the same Colour. This Distinction, however, is frivolous and trifling, since 'tis not worth while to dispute about the Etymology of this Disorder. *Asclepiades*, in his Book *De*

*Finibus*, has defin'd the choleric Passion *A quick and speedy Discharge of Humours from the Stomach and Intestines, drawing its Origin from a certain Concourse or Obtrusion of Corpuscles, and, as it often happens, from Indigestion.* Some, when explaining this Definition, observe, that the Words *quick* and *speedy* are added in order to distinguish the Choleric from the *Cæliac Passion*, the Patients labouring under which are also afflicted with a similar Discharge of Humours, which, however, is not made so speedily, but generally requires a longer Time. They also think it was necessary to add the Words, *from a certain Concourse or Obtrusion of Corpuscles*, since some Persons, upon their first going to Sea, are afflicted with such a Discharge of Humours, which, however, is not produc'd by a Concourse of Corpuscles. They are also of Opinion, that it was proper to specify, that it was frequently produc'd by Indigestion, since the choleric Passion may also arise from other Causes. Some of our Sect (the Methodic) have given the same Definition of this Disorder, cutting off the Words *Concourse of Corpuscles*, and adding in their stead the Words *Raritas Piarum*, or the Rarity of the Passages. But, in my Opinion, 'tis superfluous to enumerate the Causes of this Disorder, since 'tis of far more Importance to know the Effects produc'd by these Causes.

I also account it still more superfluous to swell the Definitions of this Disorder by an Enumeration of the antecedent Causes, since the Choleric Passion is not the only Disease which arises from Indigestion; and since Indigestion alone does not produce this Disorder, which also takes its Rise from other Causes of a particular and opposite Nature, none of which are pointed at, or specify'd, in the preceding Definitions. Hence the Discharge of Humours in the Choleric Passion proceeds from some Fault not only of the Abdomen and Intestines, but also of the Stomach: For this Reason *Soranus* asserts this Disorder to be a *Solution of the Stomach, Abdomen, and Intestines, accompany'd with instantaneous and speedy Danger.* The antecedent Causes of this Disorder may be said to be the drinking too much Wine, the Exhibition of bad Medicines, the Use of hot Waters, or the Tossing of a Vessel, which throws Persons unaccustom'd to it into violent Commotions. But we are said to increase these antecedent Causes in proportion as we protract the Indigestion, by using too large a Quantity of Aliments, to which we are either unaccustom'd, or which are delicately prepared. An Acquaintance with these Circumstances may, indeed, contribute to satisfy the Mind with respect to the Causes of the Disorder, but is not at all subservient, much less absolutely necessary to the right Conduct of the Physician, or the Relief of the Patient. A Diarrhœa and a Resolution of the Stomach bear a near Resemblance and Affinity to this Disorder. But the Followers of *Asclepiades* institute a Difference between the Choleric Passion and a Diarrhœa: The former, say they, is attended with a Discharge of Humours from the Stomach, whereas the latter is a Flux from the ultimate Parts. But we affirm, that in a Solution of the Stomach the Patient is only afflicted with a Vomiting, unattended with a Flux. When, on the contrary, the Patient labours under a Flux, not accompany'd with a Vomiting, this Symptom only denotes a Solution of the Belly alone, which is call'd a Diarrhœa. But, in the Choleric Passion, both these Symptoms, a Vomiting as well as a Flux, concur, together with other additional Symptoms. They also assert, that there are different kinds of Indigestion; and that, according to these Differencer, either a Diarrhœa or the Choleric Passion are produc'd. But, according to the Followers of *Asclepiades*, these Disorders arise from the different Degrees of the Concourse of Corpuscles, which in a Diarrhœa is but small, in consequence of the Indigestion, but considerably greater in the Choleric Passion. They also assert, that these Diseases differ with respect to the Time and Order of their Symptoms, since Indigestion is previous to the Approach of the Choleric Passion. But the Distinction between these two Disorders is obvious and easy; for Indigestion is produc'd by the Corruption of the Aliments, tho' the Patients neither vomit, nor labour under a Flux, which the *Greeks* call *Rheumatismos*: But the Choleric Passion is a Disorder accompany'd with a Vomiting and a Flux, even when the Aliments are not corrupted; for it is easy to conceive, that it may also arise from other antecedent Causes.

The Choleric Passion is generally preceded by a Heaviness and Tension of the Stomach, Anxiety, Tossing, Watchings, Gripes of the Intestines, accompany'd with that Species of Noise which the *Greeks* call *Borborismos*, (a Rumbling of the Guts) a Pain of the Belly, and a Discharge of Wind from the Anus, which affords no Relief, nidorous Eructations, a Nausea, a preternatural Discharge of the Saliva, a Sense of Weight about the Thorax, accompany'd with a Weariness of the Members. Upon the Approach of the Disorder itself the Patient is seized with a continual Vomiting at first, as it frequently happens, of the corrupted Aliments, and of a yellowish Humour and Bile. Then the Matter evacuated resembles the Yolks of Eggs, and afterwards appears porraceous and æruginous, and last of all black. The Belly is also thrown into a Commotion, accom-



pany'd with Pain; whilst, at the same time, the Excrements are, like the Matter discharged by Vomit, frothy, and highly acrid. The Patient is also afflicted with frequent Retchings to vomit. As the Disorder increases, an aqueous and thin Liquor, which sometimes resembles the Washings of Flesh, is discharg'd by Stool. Along with these Humours are also generally evacuated whitish pituitous Strigments, and a thick Pulse ensues, together with a Coldness of the Limbs, and a blackish Colour of the Countenance, a preternatural Heat, and even an insatiable Thirst, a quick Breathing, and a Contraction of the Limbs, together with a Tension of the Nerves, Calves of the Legs, and Arms. The Patient is also afflicted with a Rising of the Præcordia, accompany'd with a Pain resembling the Iliac Passion. Sometimes the Excrements are bloody, the Countenance emaciated and slender, the Eyes red, and, last of all, the Patient is seized with a Hiccough. This Degree of the Disorder was by the Antients thought to be so acute, that it kill'd the Patient before the second Day. But when it begins to take a favourable Turn, and become less violent, the Cold of the Body and Joints is lessen'd, the Pulse becomes manifestly higher, the Stools are smaller, and discharged at longer Intervals, and the Patient is gradually more and more relieved. Particular Paroxysms are to be prognosticated from Circumstances subsequent to the Disorder itself; for when the Patient is seiz'd with an Uneasiness and Tossing, a Congestion of Humours to his Stomach, and a Contraction of his Limbs, we then predict the sudden Approach of a Paroxysm: But if, after the Vomiting, the Patient finds himself easier, his Stomach relieved, the biting Pain of his Belly alleviated, and all other Symptoms lessen'd, we prognosticate a Cessation of the Paroxysm. Generally the Choleric Passion is highly intense and acute, and arises sometimes from Solution alone, and sometimes from a Solution accompany'd with a certain Degree of Stricture, as is obvious from the Pains of the Stomach, Belly, and Intestines, together with the Contraction of the Joints. In this Disorder the Stomach, Belly, and Intestines, are more severely and immediately affected; but, at the same time, all the other Members of the Body are drawn into Consent. *Cæli. Auri. Acut. Morb. Lib. 3. Cap. 19, 20.*

*Aretæus* describes the Disorder thus:

The *Cholera Morbus* is a Reflux of Matter from the whole Body upon the Stomach, Belly, and Intestines, being a very acute Disease. The Patient discharges his Stomach of all its Contents upwards by Vomiting, and all the Humidities of his Belly and Intestines by Stool. The Vomiting is at first aqueous, and the Fæces of a liquid Consistence, and fetid, the Disease proceeding from continual Indigestion; when the liquid Matters are evacuated, the Stools become pituitous, and afterwards bilious. At first these Discharges are made with Ease and Freedom, but are afterwards attended with Gripes of the Belly, and racking Pains of the Stomach.

If the Disease increases, the Gripes are more severe, there is a Lipothymy, Resolution of the Members, Restlessness, with an Aversion to all Food; or, if any be received, it is thrown up again, with much Noise and Nausea, satiated with yellow Bile, and the Stools are of a like Quality. The Patient is seiz'd with Convulsions, and Contractions of the Muscles in the Legs and Arms; his Fingers are bent; he becomes vertiginous, and molested with the Hiccough; his Nails turn livid, with a general Refrigeration, Coldness of the extreme Parts, and a Rigor of the whole Body.

If this Disorder takes a fatal Turn, the Patient falls into a Sweat, and voids black Bile upwards and downwards; he labours under a Suppression of Urine from a Convulsion of the Bladder; nor, indeed, is there any Urine collected, the Humidities being diverted upon the Intestines; his Voice fails him; his Pulse is very small and frequent, as in a Syncope; he is continually retching to vomit, but brings up nothing; and is perpetually delirious of going to Stool, as in a Tenesmus, but voids only a dry Matter, destitute of all Humidity. The Disease ends at last in a painful and miserable Death, attended with Convulsions, Strangulation, and fruitless Retchings to vomit.

The *Cholera Morbus* is most frequent in the Summer; next to that in the Autumn; the Disease is rarely known in the Spring, and least of all in the Winter. Young Persons, and those who are in the Flower of their Age, are most subject to this Disorder; old Age is least liable to it, Children being more commonly seized with it than aged Persons, but without Danger of Death. *Aretæus de Caus. et Sign. Acut. Morb. Lib. 2. Cap. 5.*

In dissecting Subjects who have died of a *Cholera*, the smaller Intestines, especially the Duodenum, with the Right Orifice of the Stomach, are generally found gangrened internally, cover'd with Bile, and yellow externally, and the biliary Ducts too much relaxed, as we find in the Writers of Medicinal Observations, among whom we shall only mention *Dolæus*, in his *Encyclop. Med. Lib. 3. Cap. 4.* and *Bartholin.* in his *Hist. Anat. Cent. 2. Obs. 81.* *Riolanus*, in his *Anthropol. Lib. 2. Cap. 20.* takes notice of the Gall-bladder being preternaturally

large, and the Ductus Cholidochus remarkably distended, in a Subject who died of this Disorder; and, in the *Act. Med. Berol. Dec. 2. Vol. 8.* we have an Account of a fatal *Cholera*, in which the Duodenum and Pylorus were internally gangren'd, and filled with a brownish-black Substance, like that thrown up by Vomit, and which, when examin'd, was found to be nothing but Bile mixed with Blood. The Veins of the Stomach were turgid with Blood, the Gall-bladder highly flaccid, and the Omentum purs'd up towards the Stomach.

Hence 'tis obvious to every one, that, as the Seat of a *Cholera* is to be sought for in the Stomach and Intestines in general, so 'tis in a more particular Manner found in the Duodenum, and biliary Ducts. Hence the whole nervous System is often drawn into Consent. Nor can we reasonably assign any other Seat of this Disorder, if we consider its material Cause; for the Matter thrown up by Vomit, and discharged by Stool, is almost always bilious, tho' in every Case the Bile is not alike unmix'd. This Matter is also sometimes mixed with acid, pituitous, saline, and other foreign Humours, as also with Blood: Hence it assumes various Colours, and is sometimes yellow, sometimes green, and sometimes black. This Commixture of the Bile cannot happen in any other Part than the Duodenum, since it is adapted to producing and cherishing such acrid Sordes, partly on account of its winding Situation and Flexures, and partly on account of the Afflux of the Bile and pancreatic Juice to it from the Ductus Cholidochus.

The Vellication of the nervous Coat, which lines the Stomach and Intestines, produced by this caustic Matter, is the immediate Cause of a *Cholera*, as this Vellication is immediately succeeded by a convulsive Constriction of the Viscera, which constitutes the Disease itself: For this Constriction, in Conjunction with the corrosive Quality of the peccant Matter, produces racking, pungent, lancinating, corroding, and biting Pains, together with a Cardialgia. In the Stomach and Duodenum this Constriction is perform'd upwards, and against the Order of Nature, whereas in the other Intestines it is perform'd downwards: Hence Vomiting, and Discharges of the Excrements by Stool, are produced at one and the same time. But as it is to be laid down as an invariable Maxim, that a larger Afflux of Humours is promoted to any Part of the Body which is vellicated; so in a *Cholera* the vital Juices flow more copiously to the Vessels of the Stomach and Duodenum, as being primarily affected. Whilst these Parts are spasmodically constricted, the Juices conveyed to them cannot freely return thro' the Veins; hence they stuff them, and first discharge into the Cavity of the Part affected their more subtile Particles, which are generally acrid, serous, sulphureous, and bilious: Hence the large Quantity of Humours discharged in a *Cholera* is to be accounted for. By a longer Continuance of these Humours the Vessels are either broken, and discharge by Drops Blood, which, in Conjunction with the bilious Sordes, coagulates into a blackish Mass; or their Contents stagnate, and they themselves are seiz'd with a fatal Inflammation and Gangrene. At the same time the Influence of the Spasms is convey'd and propagated to the adjacent Parts, in consequence of the Consent and Communication of Nerves. By this means the biliary Ducts are in a particular manner irritated to discharge their Contents into the Duodenum, and, the Spasms ceasing upon the Death of the Patient, these Ducts are found flaccid and relaxed. Besides, if these violent Motions are conveyed to the Heart, they produce a Palpitation of it; if to the Diaphragm, a Hiccough; if to the urinary Bladder, a Dysury; if to the Surface of the Body, a Coldness of the Extremities; and if to the Membranes of the Brain and Spinal Marrow, epileptic and convulsive Motions.

Having given some Account of the immediate Causes of this Disorder, we now come to investigate those more remote and secondary Causes, by which the Matter, capable of exciting such Commotions, is produced. This Matter, whether in a small or in a large Quantity, must nevertheless be of a highly acrid and caustic Quality. This Matter, then, is produced, first, by Poisons, whose Effects on the Body are so like the Symptoms of a *Cholera*, that to die of a *Cholera*, and to be poison'd, are almost the same Things. But 'tis certain, that all Poisons operate by a highly acrid caustic Salt, which, when it enters the Body in a very inconsiderable Quantity, often excites a highly violent Vellication and Convulsion of the Stomach and Duodenum, and consequently of the other Intestines. Hence the serous Humours are not only invited to these Parts, from the Mass of Blood, but the Gall-bladder, receiving violent Shocks, pours forth its bilious Contents, which produce Vomiting and Stools of different Colours, according to the Humour before lodged in the *Primæ Viæ*. This melancholy and generally fatal Effect is produced principally by Arsenic; as also by sublimate Mercury; Instances of which may be met with in *Hildanus*, *Decker*, in *not. ad Barbette*, and *Salmuth. Cent. 1. Obs. 10.* I am also of Opinion, that all the Cases of Dysenteries, observed to be excited by Poisons, ought to be ascrib'd to a *Cholera*.



Of the like Quality with Poisons are the more acrid Purgatives and Emetics, exhibited unseasonably, or in too large Doses, since they also contain a highly acrid Salt. Their pernicious Effects are generally express'd by the Names Hypercatharsis, or Hyperemesis; which, when they meet together, as they generally do, constitute a perfect Cholera. Among these Substances are the greater and lesser Sparges, the Seeds of Mezereon, and Glass of Antimony. *Rhodius, in Cent. 2. Obs. 73.* observed a violent Cholera excited by the Exhibition of ill-prepared Antimonials; and *Forestus, in Lib. 28. Obs. 44.* takes notice of the same Disorder excited by Coloquintida.

Besides, Aliments too ready to ferment, such as are sweet, pinguious, and easily corrupted, may excite a Cholera, if thick Ale, or Water, are drank after them; or if they are used by a Person of an impure Habit, in whose Stomach there is a Collection of bilious Sordes already lodged; for these Substances, uniting and fermenting with the Bile, generate an Acrimony of a more caustic Nature than Poison itself. To this Species of Aliments belong Melons, Pumpions, Cucumbers, Pine-apples, Peaches, Prunes, Grapes, Cherries, Cakes prepared with much Butter, Sweet-meats, Funguses, the Spawn of the Barbel-fish, Must, new Wine, and Ale, and too fat Fleshes: Thus *Fontanus, in Analest. Cap. 21. Exempl. 12.* informs us, that he knew an old Woman, who died of a Cholera, by drinking Ale after Cucumbers. *Guldenkleer, in Lib. 3.* informs us, that the same Disorder was produced by Peaches. And *Hennricus ab Heer*, in his fifteenth Observation, tells us, that it was produced by an unseasonable Use of Milk.

Nor are we to exclude, from the Causes of a Cholera, violent Passion, which has a strong Tendency to produce it, especially if one flies into a Passion at Meals, or after eating Food which is subject to ferment; or if the Patient eats or drinks, or, which is worst of all, takes an Emetic, or a Purgative, immediately after a Fit of Passion; for 'tis obvious to every one, that the Influence and Efficacy of Passion are highly prejudicial to the Primæ Viæ, and biliary Ducts, since they not only throw these solid and moving Parts into a Commotion, but by that means lay an effectual Foundation for an Effervescence of the Bile with any other Sordes, that may happen to be lodged there.

In the *Act. Med. Berol. Dec. 2. Vol. 1.* we have an Account of a Cholera produced by eating Cabbage, after a Fit of Passion. In the same Work, *Vol. 8.* we have an Account of a fatal Cholera produced by Passion. *Platerus* also, in his *Obs. Lib. 3.* and *Borelli, in Cent. 2. Obs. 27.* give us Instances of the same Kind. 'Tis no other Disorder than a Cholera under which tender Infants often labour, not without Danger of losing their Lives, upon their Mothers giving way to the Transports of Passion. This Disorder proceeds from the Milk of the Mother, which assumes an Orgasm by the Passion, produces an Effervescence with the Bile in the delicate Stomach of the Infant, corrodes the Intestines, and generally gives Occasion to a fatal Inflammation.

The Causes already enumerated, if the Acrimony is not very great, and deeply seated in the Intestines, will only produce a bilious Diarrhœa; which may also be produced by other Causes, that generally do not excite a Cholera. We must, in a particular manner, observe, that a bilious Flux is sometimes critical in bilious Patients, if a slight Error in Regimen, a Transport of Passion, or an Obstruction of Perspiration, have preceded. It also frequently arises spontaneously, especially in the Summer-time, and, if duly treated, proves salutary. It also frequently happens, that this Species of bilious Diarrhœa proves critical in intermittent bilious Fevers, as are most of the tertian Kind, and affords considerable Relief.

There are also some procatactic Causes, which, if they concur with these of the secondary and remote Kind, will the more certainly produce both a Cholera, and a bilious Diarrhœa. Among the procatactic Causes of this Kind, is a hot and sultry Constitution of the Atmosphere, which, as it is able to throw the whole Juices of the Body into a violent Commotion, so it produces this Effect, in a particular manner, upon the Bile: Hence, in my Opinion, it is to be accounted for, why a Cholera is endemic among the *Indians* and *Arabians*, especially in those Parts where the Fruit call'd the Pine-apple is much used, which abounds with a fermenting and highly noxious Juice. Besides, too great a Refrigeration of the Body, by repelling the acrid bilious Serum, disposes to a Cholera. Hence *Schenckius*, in the third Book of his Observations, makes mention of a Cholera, which was produced by a Refrigeration of the Feet, in Conjunction with the Use of Must and Funguses. We must also acknowledge, with *Sydenham*, that frequent Surfeits of Wine or Ale prove the Causes of a Cholera, in choleric Patients; since, in these, the Strength of the Stomach and Intestines is weaken'd, and various Crudities are generated in the Primæ Viæ, which, upon every slight Commotion of the Bile, excite the most terrible Disorder in the Animal Economy.

It is to be remark'd, that, when vegetable Juices ferment in the Stomach and Intestines, or when Liquors, procured by Fermentation, renew their Fermentation in the same Organs, the Gas Sylvestris, or incoercible Spirit, taken notice of under the Article ALCOHOL, is capable alone of stimulating these and the adjacent Viscera, so as to produce a Cholera.

As for the Prognostics of the above-mention'd Disorders, a Cholera is generally fatal; for, if we except a Plague, and pestilential Fevers, no Disease is more acute, or kills the Patient sooner, than a Cholera; especially when it seizes either old Men, Children, or such as are weaken'd by chronical Disorders. The more caustic the Matter evacuated is, and the more intense the Thirst and Heat, the greater the Danger is. And, according to *Hippocrates, in Lib. 4. Aph. 22.* if black Bile, mix'd with black Blood, be discharged, inevitable Death is prognosticated. Death is also presaged by Faintings, Convulsions, Hiccoughs, Coldness of the Extremities, together with cold Sweats. Nor is a happy Termination of the Disease to be expected, if, when the Excretions are suppress'd, the Symptoms continue. But there are some Hopes of a Recovery left when the Vomiting ceases, with subsequent Sleep and Relief, and if the Disease is protracted beyond the seventh Day. When a bilious Diarrhœa is short, and not attended with violent Gripes, it proves salutary; and the Eruption of Flatulences prognosticate, that it is near to a Termination. The Patient also, who, under this Disease, is free from Thirst, and a preternatural Heat, is generally in no Danger. On the contrary, it is a bad Sign when the Appetite is lost, whilst at the same time the Body is preternaturally soluble; as also, when the Patient is afflicted with severe Gripes, deprived of Sleep, and his Strength greatly impair'd. When a semitertian Fever, which is by the *Greeks* call'd *Hemitritæa*, and is compounded of an acute inflammatory Fever, and an intermitting Tertian, the Paroxysms happening thus alternately, is joined either to a Dysentery, a Cholera, a bilious Diarrhœa, or bilious Vomiting, these Disorders are accompanied with the highest Danger; but the best Sign is an Eruption of Flatulences from the Anus, by which we may pretty safely conclude, that the peristaltic Motion of the Intestines is in some measure restored. In a Dysentery *Hippocrates*, in his Days, observed, that an Eruption of Flatulences was a Sign of Recovery.

The Method of Cure, recommended by *Aretæus*, is thus.

In the Cholera Morbus it is not advisable to suppress the Evacuations, because Crudities are discharged by them. We ought, therefore, if they proceed easily and spontaneously, to attempt nothing; if otherwise, to promote them by continual Exhibitions of warm Water, but in small Draughts, to avoid fruitless [κραι] spasmodic Distentions of the Stomach. If the Patient be afflicted with the Gripes, or Coldness of the Feet, the Belly is to be fomented with hot Oil, in which Rue and Cumin have been boil'd, for the Discussion of Flatulences, and Wool is to be apply'd to the Part. The Feet also, being bath'd in the Oil, must be gently rub'd, and rather lightly stroked than hard press'd; and this Friction is to be extended up to the Knees, in order to recal the Heat into the Parts. This Method is to be follow'd as long as the bilious Vomiting and Purgings continue.

If the Belly has discharged all the Reliques of the old Food, and Bile comes to be voided, and there be also bilious Vomiting, with a Distention, Loathing, Restlessness, and Imbecility, give the Patient about a Quarter of a Pint [κραι] of cold Water, to stop the Looseness of the Belly, restrain the Flux of the Humours, and cool the ardent Heat of the Stomach; and this is to be done as long as he continues to vomit up what he drinks; for the cold Water is soon heated in the Belly; and the Stomach, oppress'd with both Heat and Cold, discharges itself of the Water, but is perpetually thirsting for a cool Draught.

If the Pulse be very low and languid, as well as quick and frequent, and Sweat appears in Drops upon the Forehead, Neck, and all over the Body; if the Flux of the Belly be not stop'd, and the Vomiting continue, attended with Spasms and Faintings, it will be convenient to mix, with the cold Water, a little sweet-scented and astringent Wine, which, by its Fragrancy, may recal the Patient to his Senses, corroborate him by its Strength, and yield Support to his Body by its nutritive Faculty; for Wine directly ascends to the upper Parts, so as to put a Stop to Effluxions, and is of fine Parts, so as easily to diffuse itself, and fly to the Assistance of oppress'd Nature, and by its Spirits recruits the decay'd Strength; for the better answering of this Purpose, some recent Flower [κραι] of a delicious Flavour, may be mix'd with it. If the Symptoms be very pressing, such as a Sweat, with spasmodic Affections, not only of the Stomach, but of the Nerves, a hollow Hiccough, Contraction of the Feet, a violent Flux of the Belly, with a Failure of the Sight, and a Pulse scarce perceptible, in such a State the Patient requires our utmost Assistance; and we are to let him drink freely of cold Water, mix'd with Wine, tho' not with too much of it, for fear of Inebriation, and injuring the



the Nerves, but with Crums of Bread sopt in it. Besides this, other Sorts of Aliment may be given, such as astringent Apples, Services, Medlars, Quinces, and Grapes.

If the Patient vomits up every thing, and his Stomach can hold nothing, recourse is to be had again to hot Meats and Drinks, for such a Change has sometimes suppress'd the Vomiting; but what is hot, ought to be so in an extraordinary Degree. If none of these Remedies give Relief, apply Cupping-glasses between the Shoulder-blades, and below the Navel; but continually change them, for, if they adhere long, they excite a Pain, and endanger the Raising of a Blister. Sometimes Gestation, in a mild and temperate Air, has been of Service for reviving the Spirits, for retaining the Food in the Stomach, and for restoring a good Pulse, and free Respiration.

If the Disorder still increases, let Epithems be apply'd to the Belly and the Breast, as it is usual in a Syncope, particularly Decies soak'd in Wine, Acacia, and Hypocistis, which may be mix'd with Cerate of Roses, and then spread upon Linen, and apply'd to the Belly. And, for the Breast, a Plaister may be prepared of Mastich, Aloes, the bruised Tops of Wormwood, with Cerate of Nard or Oenanthe, which is to cover all the Part. If the Feet and Muscles be affected with a Rigor, anoint them with *Oleum Sicyonium*, *Unguentum Glevicinum*, [see *SICYONIUM*, *GLEVICINUM*] or old Oil, and sprinkle them with Castor. If the Feet be cold, anoint them with Ointment of Limnæstis [*Adarces*] and Euphorbium, and wrap them in Wool, rubbing and stretching them out with your Hands. Use the same Ointment about the Spine of the Back, the Tendons, and maxillary Muscles.

If, upon the Use of these Remedies, the Sweating and Flux of the Belly be stopt, the Stomach retains the Food, the Pulse becomes full and regular, the spasmodic Affections cease, a kindly Heat diffuses itself over all the Parts, extending even to the Extremities, and the Patient falls into a Sleep, the general Concocter of all Crudities, the second or third Day he may bathe, and return to the Duties of his Calling. But if he continues to vomit up every thing that he takes, if his Sweating cannot be restrain'd, if his Body grows cold and livid, his Pulse is almost gone, and he sinks into a fainting Fit, the best Way for the Physician, in such a Case, is to find some decent Pretence for a Retreat. *Aretæus de Curat. acut. Morb. Lib. 2. Cap. 4.*

As in all Diseases, so more particularly in a Cholera, Delays are dangerous; for, according to *Celsus*, in the second Chapter of his fourth Book, no Disease requires more speedy Remedies; and, according to *Trallian*, in the fourth Chapter of his seventh Book, the smallest Delay is of the worst and most fatal Consequence. The sooner, therefore, a proper Attempt is made to cure a Cholera, the Cure succeeds the more happily, which consists principally in these three Intentions: First, to correct and temperate the peccant Matter, to dispose it for an Evacuation, and, if necessary, to eliminate it by proper Methods. Secondly, to allay and sooth the irregular and disorderly Motions, by suitable Medicines. And, thirdly, to restore the impair'd and weaken'd Strength of the nervous Parts.

The first Intention of Cure, then, is to correct the peccant Humours, and assist their Excretion. But as these are various, and as either a large Quantity of bilious Crudities, or a small Mass of subtle and caustic Matter, are found to prove the Causes of so violent Disorders, so the different Cases require somewhat different Methods of Cure. When the Disorder arises from eating too large a Quantity, or from the Use of such Aliments as readily ferment, and are converted, with the Bile, into an highly acrid Mixture, Evacuation, when slow, is to be promoted; and we must be highly careful, not to suffer the Patient's Strength to be too much impair'd. Nor, in this Case, is it proper to exhibit actual Emetics and Purgatives; but to provoke a Vomiting by liberal Draughts of warm Water, mix'd with a considerable Quantity of fresh Butter, or any oleous and mucilaginous Substance. But 'tis proper to render the Body soluble by the Injection of an oleous and emollient Clyster; for which Purpose, Whey is very proper. Broths made with young Fowls, liberally drank, are excellent for this Intention, and highly recommended by *Sydenham*. To these are to be added Absorbents, earthy Substances, and such as correct the peccant Acrimony, as the Powders of Crabs-eyes, of Sea-shells, Mother of Pearl, sealed Earth, prepared Coral, Amber, the Species de Hyacintho, the solar Earths, calcin'd Hartshorn, and Mountain Crystal, which some recommend as a Specific, with the Addition of a small Quantity of the *Theriaca Carleptis*. Whey is also possess'd of a singular Power of correcting the Acrimony, and extinguishing the Thirst, with which the Patients are often cruelly tormented. The Antients also, especially *Caelius Aurelianus*, in *Morb. acut. Lib. 3. Cap. 21.* and *Trallianus*, in *Lib. 7.* highly extol the Drinking of Water, moderately cold; of the Efficacy and Use of which, *Borelli*, in *Cent. 2. Obs. 27.* gives us an Instance;

and I myself, says *Hoffman*, am convinced of the Truth of this from many Observations.

But when, in a Person otherwise sound, a Cholera is produced by taking Poison, or by a Hypercatharsis or Hyperemesis, and when the Cause of the Cholera consists in a small Quantity of highly acrid Matter, adhering to the nervous Fibres of the Stomach, Evacuations are neither to be stopt nor promoted; but the principal Business of the Physician is rather, in this Case, to attempt the Sheathing up the thin and caustic Humour; for answering which Intention, large Quantities of oleous, mucilaginous, and pinguious Substances are to be exhibited, such as Oil of sweet Almonds, Decoctions of Oats and Barley, with Shavings of Hartshorn; as also Milk, which, in this Case, proves still more efficacious when mix'd with some proper Absorbent. The absorbent Powders may also be exhibited alternately with acidulated Medicines, which surprisingly contribute to break and blunt the Force of the Poison: Of this last Kind the principal are the *Mixtura Simplex*, the *Spiritus Vitrioli dulcis*, and the *Spiritus Nitri dulcis*.

After the Evacuation of the peccant Matter, to these are to be join'd, especially if the Patient's Strength seems too much impair'd, antispasmodic Medicines, and analeptic Specifics, obtain'd principally from the animal Kingdom; such as the Liver of the Wolf dried, the Raspings of the Stag's Penis, of the human Cranium, and of the Elk's Hoof; calcin'd River-crabs, and calcin'd human Bones; which, by the Observations of the most skilful Physicians, are known to be of singular Advantage for allaying the convulsive and spasmodic Contractions of the nervous Fibres, both in a Cholera and a Dysentery; these, however, seem to act principally as Absorbents. And as in most painful Diseases, so more especially in this, Anodynes are most safely us'd in Conjunction with Evacuants. Of this Kind are the *Pilulæ de Styraçe*, the *Pilulæ de Cynoglossæ*, and the *Pilulæ Starckianæ*: And if there is any Suspicion of a peccant Matter still remaining, and if the Motions are excessively violent, the above-mentioned Pills may be mix'd with the *Pilulæ Aloephanginæ*, or with some other gentle Evacuant. To the absorbent Powders, the *Theriaca Cœlestis*, and the Extract of Castor, and Cinnabar, may be justly added. But my Anodyne Liquor, mix'd with the Oil of Mace, or the Tincture of Castor, is beneficial above all other Medicines, and deserves uncommon Praises: Nor are external Pargories and Anodynes to be depriv'd of the Encomiums which are justly due to them. Of this Kind the principal are, the *Ceratum Stomachale Mastichinum Galeni*, the *Balsamum Embryonum*, the *Spiritus Theriacalis*; Liniments prepar'd of the nervous Oils of Nutmeg, Wormwood, and Mint, *Peruvian Balsam*, Castor, and Camphire; Cataplasms of Leaven, Vinegar of Rue, and Spirit of Wine, as also discutient and pargoric Bags. But when the spasmodic Motions are very violent, and not at all proportion'd to the Bulk of the peccant Matter, there is not a more valuable or more efficacious Medicine for stopping them gently, and facilitating the remaining Part of the Cure, than express'd Oil of Nutmegs, together with nervous Liniments apply'd to the Region of the Stomach. My *Balsamum Vitæ* also, apply'd to the Part affected, with folded Linen Cloths, is in this Case highly effectual.

When, by means of these Medicines, the peccant Matter, which nourish'd the Disease, is evacuated, and the spasmodic Motions sooth'd, we may with the greater Success corroborate by proper Medicines the Parts weaken'd under this Disease, because their Tone and Elasticity are generally much impair'd. This Intention is answer'd by the Root of Cascarella, exhibited in Essence, in Powder, or in Extract; or by the *Peruvian Bark* reduc'd to an Electuary, with the abstergent and corroborating Extracts, Essence of Orange-peel, mix'd with Essence of red Gentian and Amber. No inconsiderable Advantage is, also, to be reap'd from the external Use of rectified Spirit of Wine, or Hungary-water, or the Spirit of the Flowers of Roman Chamomile, mix'd with the distill'd Oil of Mint. But, when the Force of the Disease is subdued, the Patient is above all Things to observe a strict Regimen, and guard against the Sallies of Passion; lest by that means he should again relapse into a Cholera, in consequence of the weak Tone of his Viscera. Broths prepar'd with Veal, Fowls, the Roots of Succory, Parsley, Sparrow-grass, Chervil, bruised Crab-fish, and Lemon-juice, are, of all others, the most proper Food; with these, also, chalybeate Tinctures may be used, in order to corroborate the Patient.

As for a bilious Diarrhœa, when it is moderate, and the Strength of the Patient entire, Medicines are scarcely necessary for its Cure. If it continues for any considerable Time, Clysters are to be injected, and Preparations of Rhubarb us'd internally. When it happens to be excessively violent, the absorbent Powders, in Conjunction with Mountain Crystal, are to be exhibited, in order to correct the Acrimony; my Anodyne Liquor is to be taken in Mint-water, to allay the Spasms, and externally my *Balsamum Vitæ* is to be apply'd to the Abdomen.



The hotter the Season, the Climate, and the Constitution of the Patient are, the more salutary the drinking cold Water proves in a Cholera; but, besides its internal Use, its external Application to the Stomach, a Practice follow'd by some of the Antients, we think unsafe, and full of Danger; because, by this means, a sudden Obstruction of the Evacuations may be brought on. Hence we are also to account for the Virtues of medicinal Waters, when drank for the Cure of a Cholera.

As in a Cholera arising from the taking Poison, or an acrid Purgative, Milk is of singular Service, by sheathing up the caustic Principle, and carrying it off with it; so when a Collection of too acid Sordes is present, or when its Excretion is too slowly carry'd on, Milk ought to be cautiously exhibited, or at least it ought to be mix'd with some Absorbent. Whey, on the contrary, will excellently answer the Purpose of common Drink; since it is of singular Use, not only in extinguishing the Thirst, but also in correcting the Acrimony.

Laxatives, exhibited internally, are very rarely proper in the Cure of a Cholera: But if Evacuation by Stool is indicated, this Intention is best answer'd by Clysters, or by Preparations of Rhubarb exhibited internally; for sweet Substances, Preparations of Manna, and laxative Syrups, however mild and gentle in other respects, are yet far from being proper in a Cholera: Corroborative and spirituous Liquors, exhibited before the peccant Matter is sufficiently evacuated, with an Intention perhaps to suppress the Vomiting, frustrate the Expectation of the Physician, since they are so far from producing this Effect, that they increase not only the Vomiting, but also the other Symptoms. With respect to Anodynes, and more particularly Oil of Henbane, we must observe, that they are by no means to be us'd when the Strength of the Patient is too much impair'd, or when he labours under an Inflammation of the Viscera, because in these Cases they may induce a fatal Sleep, and a Mortification.

As in dysenteric Patients, who are at the same time plethoric, Venesection contributes very much to prevent an Inflammation, and mitigate the Symptoms; so in the like Circumstances it is to be us'd in a Cholera, especially if the Patient's Strength is not exhausted. *Riverius*, in his *Prax. Med. Cap. 9.* highly recommends Venesection in this Disorder.

Neither a bilious Diarrhoea, nor one of any other kind, ought to be immediately and suddenly stop'd, but the Humours are to be slowly and gradually corrected; for which Intention, a Scruple or half a Dram of gently toasted Rhubarb, with a few Grains of Nitre, is very proper, as it gently evacuates the peccant Humours, and afterwards corroborates the Viscera by slightly constricting their Coats; for by its more subtil Parts it opens, and by those of a more earthy Quality it contracts, both of which Properties it possesses when toasted.

In a Cholera, as well as a bilious Diarrhoea, half a Dram of the express'd Oil of Nutmegs, either by itself, or mix'd with one Grain of *Helmont's* Laudanum Opiatum, and exhibited in Broth, is of singular Efficacy for correcting the Acrimony of the Humours. Weak Emulsions also, prepar'd of Almonds and white Poppy-seeds, with an Addition of the Syrup of white Poppies, and pure Spring-water, excellently answer this Intention.

When the Diarrhoea is highly obstinate, after the Use of toasted Rhubarb for some Days, it is proper to exhibit a Sudorific, consisting of one Grain of recent Theriacal, together with calcin'd Hartshorn, and of diaphoretic Antimony, and purify'd Nitre, each twelve Grains: A Cataplasm of Leaven, Vinegar, and Spirit of Wine, with an Addition of a few Drops of the Oils of Mint and Cloves, apply'd warm to the Præcordia, not only excellently corroborates the subjacent Parts, but also determines the Course of the Humours to the Circumference of the Body, and promotes the cutaneous Evacuation.

When a Cholera is excited by Arsenic, we must, with all Expedition, exhibit pinguious Substances, such as Oil of sweet Almonds, Linseed-oil, fresh Butter, and Oil of Olives, with moderately warm Water; for these Substances afford the most speedy Relief, not only because they excite a Vomiting, by which the greatest Part of the Arsenic is thrown up, but also because, by their means, the caustic Acrimony, which vellicates the nervous Fibres of the Stomach, is obtunded, and the spasmodically-constricted Parts relax'd.

When the Force of the Cholera or bilious Diarrhoea is subdued, it is still expedient for some time to use an emollient Diet, that, by this means, the vellicated and injur'd nervous Fibres of the Stomach and Intestines, may be in some measure sooth'd and render'd easy: For this Purpose sweet Milk, recent Butter, excorticated Barley, boil'd with Broth of Fowls or Milk, as also sweet Whey, are very proper.

When a Cholera is complicated with a Fever, Milk is not in that Case properly exhibited, since, in consequence of the Heat, it runs into a Coagulum; by which means greater Pains,

Tensions of the Viscera, Head-achs, and Loathing of Aliments, are excited. For this Reason, that it may be safely exhibited to feverish Persons, especially Children, and young Persons, rather than those advanc'd in Years, *Trallian* orders a large Quantity of Spring-water to be mix'd with it, after which it is to boil up three or four times, and then be taken off the Fire. He also affirms, that Milk, when thus prepar'd, does not prove prejudicial to dysenteric Patients, even when labouring under a Fever.

In a Cholera and bilious Diarrhoea, especially that Species of it which is excited by the Transports of Passion, we are carefully, but more particularly about the Beginning, to abstain from Sudorifics, and a sudorific Regimen; since, by their means, violent rheumatic and arthritic Disorders are generally produced.

*Riverius*, in the thirty-third Observation of his first Century, gives us a very memorable Case in the following Words: "A certain Man, of a robust and bilious Habit of Body, was seiz'd with a pretty violent bilious Diarrhoea, accompany'd with a highly intense Thirst. Being call'd, I prescrib'd for him Sal Prunellæ in his ordinary Drink, as also in Julaps, prepar'd of the Waters of Lettuce and Purslain, and to be taken thrice a Day, by which means he was recovered in twenty-four Hours time." In Disorders of this kind, the Efficacy of Nitre or Sal Prunellæ is very considerable, as it not only corrects the Heat, but prevents Inflammation. *Frederic Hoffman*.

As *Sydenham's* Method of treating a Cholera is excellent, and more frequently attended with Success than any other, I shall subjoin his entire Account of this Distemper.

This Disease was more epidemic in the Year 1669. than I ever remember to have known it in any other. It comes almost as constantly at the Close of the Summer, and towards the Beginning of Autumn, as Swallows in the Beginning of Spring. There is also an Indisposition caused by a Surfeit, which happens at any time of the Year, which, with respect to its Symptoms, resembles the Cholera Morbus, and yields to the same Treatment, and yet it is of a different Kind. The Cholera Morbus is easily known by the following Signs: 1. Immoderate Vomiting, and a Discharge of vitiated Humours by Stool, with great Difficulty and Pain; 2. Violent Pain and Distention of the Abdomen and Intestines; 3. Heartburn, Thirst, quick Pulse, Heat and Anxiety, and frequently a small and irregular Pulse; 4. Great Nausea, and sometimes colliquative Sweats; 5. Contraction of the Limbs; 6. Fainting; 7. Coldness of the Extremities, and other like Symptoms, which greatly terrify the Attendants, and often destroy the Patient in twenty-four Hours. There is likewise a dry Cholera, occasioned by a Flatus, which passes upwards and downwards, without Retchings or Stools; but I remember to have seen only a single Instance of it, at the Beginning of the present Autumn, whereas the former Species was very common.

Much Consideration and Experience have taught me, that to endeavour, on the one hand, to expel the sharp Humours which feed this Disease by Purgatives, would be like attempting to extinguish Fire with Oil, as the most lenient Cathartics would increase the Disturbance, and raise new Tumults. And, on the other hand, to check the first Effort of the Humour in the very Beginning, by Opiates and other Astringents, whilst I prevented the natural Evacuation, and forcibly detain'd the Humour in the Body, would doubtless destroy the Patient by an intestine Commotion, the Enemy being pent up in the Bowels.

Let a Chicken be boil'd in about three Gallons of Spring-water, so that the Liquor may scarce taste of the Flesh. Several large Draughts of this are to be drank warm, or, for want of it, Posset-drink. At the same time, I order a large Quantity of the same to be given at several times, successively, by way of Clyster, till the Whole be taken in, and discharg'd by Vomiting and Stool. An Ounce of the Syrup of Lettuce, Violets, Purslain, or Water-lily, may be added to the Draughts and Clysters; but the Liquor will answer the End pretty well alone. The Stomach in this manner being often loaded with a large Quantity of Liquor, and its Motion, as it were, inverted thereby, and Clysters being frequently thrown in, the sharp Humours are either evacuated, or, their Acrimony being blunted, restored to their due Temper and Mixture.

When this Business is over, which requires three or four Hours, an Opiate completes the Cure. I frequently use the following; but any other may be substituted in its stead.

Take of Cowslip-flower-water, an Ounce; Aqua Mirabilis, two Drams; Liquid Laudanum, sixteen Drops; Mix them together.

This Method of diluting the Humours is abundantly safer and quicker, than the ordinary one of treating this dangerous Disease, either by Evacuants, or Astringents; for Evacuants increase the Disturbance and Commotions, and Astringents detain the Enemy in the Bowels; so that, not to mention the



Trouble occasion'd by prolonging the Disease, there is Danger, lest the vitiated Humours get into the Blood, and cause a Fever of a bad kind.

But it must be carefully noted, that if the Physician be not call'd, till the Patient is exhausted by the Vomiting and Looseness having continued, for Instance, ten or twelve Hours, and the Extremities are become cold, he must then, omitting all other Remedies, have immediate Recourse to Laudanum, the last Refuge in this Disease, which is not only to be given during the Urgency of the Symptoms, but repeated every Morning and Night, after the Vomiting and Looseness are gone off, till the Patient recovers his former Strength and Health.

Tho' this Disease be epidemic, as we remark'd above, yet it very rarely lasts longer than the Month of *August*, wherein it began; whence one may take Occasion to consider the elegant and subtle Contrivance Nature uses in producing epidemic Diseases: For tho' the same Causes entirely remain, which may occasion this Distemper in several Persons towards the End of *September* as well as in *August*, namely, a Surfeit of Fruit, yet we find the same Effect does not follow; for whoever carefully attends to the Appearances of a legitimate or true Cholera Morbus, of which only we now treat, must acknowledge, that the Disease occasionally happening at any other time of the Year, tho' proceeding from the same Cause, and accompany'd with some of the same Symptoms, totally differs from that just mention'd; as if there lay conceal'd some peculiar Disposition in the Air of this particular Month, which is able to impregnate the Blood, or Ferment of the Stomach, with a kind of specific Alteration, adapted only to this Disease. *Sydenham*.

*Hoffman*, in his account of a Cholera, having taken notice of one Sort caus'd by Poison, I must give the following remarkable Case from *Sydenham*, as it appears to insinuate a better Method of curing it, than that laid down by the former of these Authors.

About two Months since, a Person in my Neighbourhood desired me to visit his Servant, who had taken a large Quantity of Mercury Sublimate, being melancholy mad for Love, as I afterwards heard. The Poison had been swallow'd near an Hour when I came, and his Mouth and Lips much swell'd; he was extremely sick, had a burning Pain in the Stomach, and was almost kill'd with Heat. I order'd him to drink three Gallons of warm Water as quick as possible, and to take a large Draught of the same after each Time of Vomiting; and as soon as it appear'd, from the Gripings, that the Poison was going downwards, I likewise directed warm Water, alone, to be plentifully thrown up by way of Clyster, in order to wash his Bowels. The Wretch complied, being now very desirous to live, and drank several Pints of Water more than I had directed. He told his Friends that were by, that the Water which first came up was very acrid, by reason of its being saturated with the poisonous Salt; but that it was less acrid after every Vomiting, till it length it became insipid; and the Gripes that succeeded, were remedied by injecting Water alone Glysterwise. By this single Method the Patient was recovered in a few Hours; only the Swelling of his Lips did not immediately fall, and his Mouth remain'd ulcerated; occasioned by the Particles of the Poison, which came up with the Water by vomiting; but these Symptoms yielded in four Days to a Milk Diet. I preferred Water to Oil, (which is generally used by the less Knowing without Success) and all other Liquors, because, being thin, it seem'd fitter to absorb the Particles of this poisonous Salt, than any other Liquor that was thicker, or already impregnated with the Particles of some other Body. *Sydenham*.

CHOLERICUS, *χολερικὸς*, signifies either a Person of a choleric Constitution, whose Humours abound with Bile, or one who labours under the Cholera Morbus. *Castellus*.

CHOLOBAPHINON, *χολοβάφινον*, is an Epithet of Copper, which resembles Gold in Colour. *Libavius*, *Art. Chym.* calls it *A's Coronarium*.

CHOLOMA, *χόλωμα*, from *χολός*, lame, maimed, in *Hippocr.* *περὶ ἀρθ.* signifies, according to *Galen*, any Distortion of a Member, or Depravation of it with respect to Motion. It is taken also in a particular Sense for Halting or Lameness of a Leg, as appears from 6 *Aph.* 80.

CHOLOS, *χολός*, lame, like the preceding Word, has a general as well as particular Sense; hence *χολὸν χεῖρ*, "a lame Hand." *Hip. Prorrh.* 2.

#### CHONDRILLA.

The Characters are,

The Root is perennial, and the Leaves are very finely jagged.

*Boerhaave* takes notice of four Sorts of Chondrilla.

1. CHONDRILLA PRIMA, Offic. Diosc. *Chondrilla cœrulea*, Ger. 224. Emac. 286. Buxb. 71. *Chondrilla cœrulea altera Cichorei sylvestris folio*, C. B. 130. Buxb. Ind. A. 83. *Cœrulea sive purpurea*, Park. 785. *Chondrilla vel Chondrilla*, Chab. 317. *Chondrilla vel Chondrilla cœrulea*, J. B. 2. 1019.

Raii Hist. 1. 227. *Lactuca sylvestris perennis purpureo-cœrulea, laciniato longo folio*, Hist. Oxon. 3. 59. *Lactuca perennis humilior flore cœruleo*, Tourn. Inst. 473. Elem. Bot. 376. GUM SUCCORY. Dale.

It grows in uncultivated Places in *Germany* and *Italy*, and flowers in Summer, according to *Dioscorides*.

Dale supposes this Herb to be the *Chondrilla prima* of *Dioscorides*.

There is a Gum found about the Branches like Mastich, of the Bigness of a Bean, which, bruised with Myrrh, and apply'd in Linen to the Quantity of an Olive, provokes the Menses. The Herb, with the Root, is bruised, and, with an Addition of Honey, made into Troches, which, diluted and mixed, will deterge the Alphi. This Gum also glutinates Hairs, and the fresh Root has the same Effect, if a Bodkin be wet with its Juice, and afterwards used about the Hair. Drank in Wine, it cures the Bite of a Viper; and the Juice boil'd, and drank with Wine, or alone, stops a Looseness. *Dioscorides*, Lib. 2. Cap. 161.

2. Chondrilla; altera; Cichorei sylvestris folio; flore albo. C. B. P. 130. *Lactuca, perennis, humilis, flore albo*. T. 474.

3. Chondrilla; altera; Cichorei sylvestris folio; flore carneo. *Lactuca, sylvestris, majore flore incarnato*. Flor. 2. 26. *Chondrilla, latifolia, laciniata, flore incarnato*. H. L.

4. Chondrilla; cœrulea; laciniata; latifolia. C. B. P. 130. *Lactuca, perennis, humilior dentata*. Nissole. BLUE FLOWER'D GUM-SUCCORY, WITH BROAD CUT LEAVES. *Boerhaave's Index alter Plantarum*, Vol. 1.

*Boerhaave* takes notice of a Chondrilla, to which he attributes different Characters, which are,

The Seeds are oblong, narrow, and the Calyx in a manner fistular and cylindrical.

*Boerhaave* mentions five Species of this Plant.

1. Chondrilla; Sonchi folio; flore luteo-pallescente. T. 475. *Sonchus, laevis, laciniatus, muralis, parvis floribus*. C. B. P. 124. *Lactuca, sylvestris, murorum, flore luteo*. J. B. 2. 1004. Flor. 2. 26. a.

2. Chondrilla; Sonchi folio; flore purpurascens; major. T. 475. *Lactuca, montana, purpureo-cœrulea, major*. C. B. P. 123. *Lactuca, sylvestris, purpurea*, J. B. 2. 1005. Flor. 2. 26. *Sonchus montanus, purpureus, τετραπύλλον*. Col. 1. 245. H.

3. Chondrilla; hieracii folio; annua. T. 475. THE ANNUAL GUM-SUCCORY, WITH HAWKWEED-LEAVES. *Hieracium, pulchrum*. J. B. 2. 1025. *Hieracium, montanum, alterum, λεπτομακρόκλων*. Col. 1. 248. a, b.

This Plant is annual, not bitter; the Leaves are very soft and glutinous; the Stalk is fistulous; the Semiflorets are yellow, and indented at the Extremity. It flowers about the End of *May*, and in *June*. *J. Bauhine's* Figure is preferable to that of *Columna*. *Martyn's Tournefort*.

4. CHONDRILLA ALTERA, Offic. *Chondrilla viminea*, J. B. 2. 1021. Chab. 317. *Chondrilla (rectius Lactuca) viminea*, Raii Hist. 1. 223. *Chondrilla Cichoroides*, Dill. Cat. 119. *Chondrilla juncea*, Ger. 226. Emac. 288. *Chondrilla juncea viscosa arvensis, quæ prima Dioscoridis*, C. B. 130. Tourn. Inst. 475. Elem. Bot. 377. Boerh. Ind. A. 84. Buxb. 71. *Chondrilla viminalibus virgis*, Park. 788. *Lactuca sylvestris perennis lutea, juncea, viminalibus virgis*, Hist. Oxon. 3. 85. GUM-SUCCORY, WITH YELLOW FLOWERS. Dale.

It grows in sandy Places in *Germany*, *Italy*, and other Countries, and flowers in *July*. The Herb is used; and the Stalks and Leaves thereof, according to *Dioscorides*, are endu'd with the Virtue of Concoction, and the Juice reduces the disorder'd Hairs of the Eyelids to their proper and convenient Situation.

Dale takes this to be the Chondrilla Secunda of *Dioscorides* from his Description of it, as bearing an oblong Leaf, eaten about the Edges, spread upon the Ground, a Stalk full of Juice, with a slender, round, fresh, smooth, yellowish, and juicy Root; which Characters, he thinks, agree better with this Herb than with the bulbous Chondrilla of *C. Bauhine*.

5. Chondrilla; viminea; viscosa; Montspeliaca. C. B. P. Prodr. 68. H. *Boerhaave's Index alter Plantarum*, Vol. 1.

#### CHONDRILLOIDES.

The Characters are,

The Leaves are those of the Chondrilla, C. B. P. the Stalks spread themselves into numerous Branches, and the Calyx is squamous, and almost cylindrical. *Boerhaave's Index alter*, Vol. 1.

*Boerhaave* mentions but one Species of this Plant.

Chondrilloides; perennis; lutea. *Vaill. Boerhaave's Index alter Plantarum*, Vol. 1.

CHONDROS, *χόνδρος*. The same as ALICA, which see. It signifies also any grumous Concretion, as of Mastich or Frankincense; and is, besides, the Greek Word for a Cartilago; in *Hippocrates* particularly the *Cartilago Xiphoides*.

CHON.



**CHONDROSYNDESMUS**, *χονδροσύνδεσμος*, from *χόνδρος*, a Cartilage, and *σύνδεσμος*, a Ligament, is a cartilaginous Ligament. *Galen, de Temper. Lib. 1, Cap. 9.*

**CHONE**, *χώνη*. See **CHOANA**.

**CHOPINO**, **CHEOPINA**, a Chopine. A liquid Measure at *Paris*, containing, according to *Lemery*, fifteen Ounces and a half of Water; but *Penicher* and the *Diët. Trev.* make it to consist of sixteen Ounces. *Rieger.*

**CHORA**, *χώρα*, a Region, is by *Galen, de Usu Partium, Lib. 8. Cap. 6.* spoken particularly of the Cavities of the Eyes. The same Author frequently uses it to signify a void Space.

**CHORDA**, *χορδή*, properly a musical String or Cord, metaphorically signifies sometimes a Tendon; and by the Poets the Intestines are commonly called Chordæ. *Paracelsus, Lib. 7. de Orig. & Cur. Morb. Gal.* calls the Pudenda by the Name of *Chordæ*. A painful Tension of the Penis, in the Lues Venerea, goes also by this Name. See **CHORDE**.

**CHORDAPSUS**, *χορδαψός*, from the preceding Word, and *ἅπτωμαι*, to touch, because the Intestines, in this Affection, feel to the Touch like stretched Cords, is the same as the *Ileus*, or Iliac Passion. See **ILIACA PASSIO**.

**CHORDATA** *Gonorrhœa*, is a *Gonorrhœa* attended with a painful Tension of the Penis. *Blancard.*

**CHORDE**, or **CORDE**. This is a Symptom attending a *Gonorrhœa*. It consists in a violent Pain during the Erection of the Penis, which on these Occasions is very frequent and involuntary. The Pain is perceived principally under the Frænum, and along the Duct of the Urethra; and the Penis is incurved downwards.

*Dr. Cockburn*, in his Treatise of a *Gonorrhœa*, says, that this binding Pain, in the time of Erection, is a Symptom of such Difficulty, that Physicians have never attempted to explain it; and most of them have thought it the same with an Inflammation of the Frænum, contrary to all Experience, and ancient Description. *Jodocus Lommius*, and some other good Authors, speaking of an Ulcer in the Urethra, say the Pain in Erection shews this Ulcer to be already form'd, which Pain affects the Penis in such a manner as if it were hard bound with a Cord (*ut veluti fune substringi videatur*). Now this Description agreeing perfectly well with the Chordé in *French*, and Corded in *English*, it must be a great Impropriety, in either of these Languages, to say, that one has a Cordee. But the Injury done to Practice is far greater, by suppressing so sensible and obvious a Symptom, and translating it to another Part; for hereby this proper Symptom is concealed, merely to avoid a Difficulty it were far better to confess; and Experience is forced to give way to Speculation, which ought not to be done upon any Account whatsoever.

Perhaps there is not a more surprising Phænomenon, than that any Part, having a Sore or an Ulcer in its very Substance, should give such a Feeling and Sensation, as if it were ty'd round with something, while its Parts are drawn from one another, as they are when its Bulk is increased. In Reason the contiguous Parts receding from one another should rather affect us with a tearing Pain, than with that of being bound round with a Cord.

But to increase the Paradox, the Sore is really inward in the very Urethra; but the Binding, the compressing Cause which hurts this sore Urethra, is really without, and therefore the Mystery is out. This Assertion is evident from the Course and Situation of the Urethra; for as it runs between the cavernous Substances of the Penis, and of its own outward Coat, it is always compress'd by them when they are inflated, more or less according to the Degree of their Inflation: Wherefore the sore and hurt Urethra is every-where compress'd on all Sides, and cannot give any other Sense of Pain than that of being hard bound round with a Cord. This Compression of the Urethra has already been observ'd to be so great, that it is with some Difficulty the Seed and Urine are express'd in times of a rigid Erection.

Hence we may know the Place of the Hurt, and how far it reaches, by this Pain in Erection.

The binding Pain in Erection, or the Cording of the Penis, being really a Squeezing of the corroded Urethra between the cavernous Bodies, and the Erection itself being often excited by the Stimulating of the Matter of a *Gonorrhœa*, the Cure of this Cording must be had by preserving the Urethra from being corroded, or by suppressing the Erection, whereby the Pressure of the Urethra will be prevented.

The first may be effected by mild Diuretics, softening Emulsions, and cooling Injections; but the last can only be perform'd by those means that give the most sudden Check to the Swelling of the Penis. If Men therefore recollect what happens to them in immersing themselves in cold Water, a River, the Sea, and far more in a cold Bath, they cannot be in any want of a ready Remedy on such Occasions. Cold Water thus infallibly answering our Expectations, we must not think of losing Time, when so speedy and effectual Means are at hand, in our Parts of the World especially. A Lady of Snow, *St. Francis's* Mistress, is a certain Relief. However, to keep up to the Rule of our

Method, I shall relate some of the Forms, which Authors recommend, though all of them tend to the same Purpose.

Though Women have no Glans or Frænum to be affected with the sharp Running, yet the Sphincter of the Vagina, Clitoris, and Lips themselves, are inflamed with the sharp Matter, after the same manner as are the mentioned Parts; and therefore the Method of their Cure must be the same, which is by such Medicines as allay the pressing Inflammation, and secure the Parts against their being corroded with the Sharpness of the Corruption; both which are to be attained by the following Medicines.

Take of tepid Milk, and the Water of red Roses, each one Ounce; of Sugar of Lead, one Dram and an half; and foment the Glans and adjacent Parts with the Mixture.

Take of Elder-flowers, and Bran, each one Handful; of white Lily-root, one Ounce; boil these in Frog-spawn-water, and new Milk, of each one Pint: To the strain'd Liqueur, when tepid, add one Dram of the Balsam of Lead: Mix, and with the Mixture foment the swelled Parts.

Take of the Leaves of Sorrel and Elder-flowers, each an Handful; and of Wheaten Bread, two Ounces: Mix together, and with fresh Butter-milk make into a Cataplasm, to be apply'd to the inflamed Glans. *Cockburn, Of a Gonorrhœa.*

*Turner*, an Author so highly orthodox in Physic, that he seems to consider every Attempt to improve Medicine as an Injury done to himself, or his Profession, reasons much against this Account of a Chordé. With respect to Practice, speaking of the Application of cold Water, he says, "Yet how far such a sudden Constriction of the Pores may contribute to the Shutting in of the Poison, and fixing the malign Humour, we are not surely apprised; besides the Danger of Gangrene, in case of very great Fluxion upon the Part, by retarding, if not entirely checking, the Circuit of the Blood; so that if any such Experiment were try'd to remove this Complaint, I should prefer an Epithem dipt in Oxycrate, and apply'd to the Pubes or Testicles of the Patient. But, indeed, I think it better to forbear either, and purge off the Virulence, which gave Rise thereto, by some brisk Mercurial Cathartic, making Revulsion also between whiles with a Dose or two of the Turpeth Mineral, and, on the intermediate Days, directing some proper refrigerating and attemperating Emulsions, together with the nitrous, saturnine, or camphorate Solutions." *Turner's Syphilis.*

It has been found by Experience, that rubbing a Mercurial Ointment into the Part affected, and along the Duct of the Urethra, has done considerable Service in this Complaint.

**CHOREA SANCTI VITI**. *St. Vitus's Dance.*

*G. Horstius* says, that he talked with some Women, who once every Year paid a Visit to the Chapel of *St. Vitus*, near *Ulm*, and there exercised themselves Day and Night in Dancing, being disordered in Mind, till they fell down like those in an Ecstasy. By this means they seem'd to be restored to their Health for a whole Year till the Return of *May*, when they were again seized with a Restlessness, and disorderly Motions of their Limbs, so as to be obliged, at the anniversary Feast of *St. Vitus*, to repair again to the same Chapel for the sake of Dancing. *Horst. Epist. Med. S. 7. de admirandis Convulsionibus.*

From this Tradition a sort of Convulsion, to which Girls are principally subject before the Eruption of the Menstrues, took its Name; tho', as it should seem, improperly, because the Disorder mentioned by *Horstius*, and what we call *St. Vitus's Dance*, appear to be very different.

*Sydenham* says, that *St. Vitus's Dance* is a kind of Convulsion, which principally attacks Children of both Sexes, from ten to fourteen Years of Age. It first shews itself by a certain Lameness, or rather Unsteadiness of one of the Legs, which the Patient draws after him like an Idiot; and afterwards affects the Hand on the same Side, which, being brought to the Breast, or any other Part, can by no means be held in the same Posture for a Moment, but is distorted, or snatched by a kind of Convulsion, into a different Posture and Place, notwithstanding all possible Efforts to the contrary. If a Glass of Liqueur be put into the Hand to drink, before the Patient can get it to his Mouth, he uses a thousand odd Gestures; for, not being able to carry it in a straight Line thereto, because his Hand is drawn different Ways by the Convulsion, as soon as it has reached his Lips, he throws it suddenly into his Mouth, and drinks it very hastily, as if he only meant to divert the Spectators. As this Disorder appears to me to proceed from some Humours thrown upon the Nerves, which, by their Irritation, excite preternatural Motions, I conceive, that the curative Indications are to be wholly directed, first, to lessen those Humours by Bleeding and Purging; and, secondly, to strengthen the nervous System.

And,



And, to answer these Ends, I use the following Method: First, I order seven Ounces of Blood to be taken away from the Arm, or such a Quantity, whether more or less, as best suits the Age of the Patient: The next Day I exhibit half the Quantity, or a little more, of my usual lenitive Purge, of Tamarinds, Sena, Rhubarb, Manna, and Syrup of Roses (see CATHARTICA); and in the Evening I give the following Paregoric.

Take of Black-cherry-water, an Ounce; compound Piony-water, three Drams; Venice Treacle, a Scruple; liquid Laudanum, eight Drops: Mix them together for a Draught.

I order the Purge to be repeated thrice, with the Interposition of a Day between each Purgation, and the Opiate to be given always in the Evening after the Operation. Afterwards I prescribe Bleeding and Purging, as before; and thus I bleed and purge alternately, till the Patient has been blooded three or four times, and purged after every Bleeding, as often as the Strength will admit; for it is to be carefully observed, that there must be a sufficient Interval allowed between those Evacuations, to prevent the mischievous Effects therefrom. On the intermediate Days I prescribe the following Remedies:

Take of the Conserve of Roman Wormwood, and Orange-peel, each one Ounce; Conserve of Rosemary, half an Ounce; Venice Treacle, and candy'd Nutmeg, each three Drams; candy'd Ginger, a Dram; Syrup of Citron-juice, enough to make them into an Electuary, of which the Quantity of a Nutmeg is to be taken in the Morning, and at Five in the Afternoon, drinking after each Dose five Spoonfuls of the following Infusion:

Take of the Roots of Piony, Elecampane, Masterwort, and Angelica, each an Ounce; the Leaves of Rue, Sage, Betony, Chervil, white Horehound, and the Tops of the latter Centaury, each an Handful; Juniper-berries, six Drams; the Peel of two Oranges: Slice and infuse them without Heat in six Pints of Canary, and strain it off as you use it.

Take Rue-water, four Ounces; compound Piony, and compound Briony-water, each an Ounce; Syrup of Piony, six Drams: Mix them for a Julap, of which let four Spoonfuls be taken every Night going to Bed, with eight Drops of Spirit of Hartshorn. Apply a Plaster of Gum Camanna, spread on Leather, to the Soles of the Feet.

According as the Recovery advances, the Foot and Hand grow more steady, insomuch that the Patient can bring the Glass in a more direct Line to his Mouth, which certainly shews how much better he is. But though, in order to finish the Cure, I do not advise Bleeding more than three or four times at most, yet purgative and alterative Medicines are to be used till the Patient is quite well. And, because such as have once had this Disease are subject to a Relapse, it is proper to bleed and purge them for some Days, about the same Season the next Year, or a little earlier than it first began.

Sydenham informs us, he cured five Patients of this Distemper by the preceding Method.

Dr. Cheyne gives a somewhat different Method of Cure in St. Vitus's Dance. His curative Intentions are, first, to evacuate; secondly, to attenuate the Juices; lastly, to brace the relaxed Fibres.

St. Vitus's Dance is certainly a Mixture of paralytic and convulsive Disorders. It very often arises out of an Epilepsy, especially in young People, when the original Distemper is overcome, and a greater Degree of Strength is obtained; tho' sometimes it is only a Prelude to that severe Distemper, and may itself sometimes be an original Disease. *Cheyne's English Malady.*

When I treated this Distemper, says our Author, after the following Method, I never fail'd of a standing Cure, in all those that came under my Care, as some now living can witness. The Party being young, and otherwise healthy, (else a proper Method for a Cure of a Cachexy was premitied) to answer the first Intention of the general Cure, I ordered a Vomit (generally I combin'd either the emetic Wine with an Infusion of the Ipecacuanha, or the emetic Tartar with the Powder of the Root, wherein the latter adds Certainty and Expedition, the former Force and Strength, to the Operation) to be repeated regularly on the same Day of the Week, for a considerable time, till the Distemper began to decline, and then I lengthen'd its Intervals, together with an anticephalic Diet, already explained. To answer the second Intention, I prescribed, for a Month or six Weeks, on all the intermediate Days, a large Dose of Æthiops Mineral, with *Darb Waters* to wash it down.

And lastly, after this Course finished, to answer the third Intention, I gave an Electuary of the Bark, Orange-peel, Powder of Acorns, and Crocus Martis Astringens, to brace the Nerves inwardly; and ordered cold Bathing every other Day, for producing the same Effect outwardly; and the Cure seldom exceeded three Months. *Cheyne on the Gout and Bath Waters.*

CHOREGIA, χορηγία, from χορῆς, a Company of Dancers and Singers, and ἄγω, to lead, is properly the Office of the Master of the Plays or Revels, but is metaphorically used by *Hippocrates*, in παρῳγγεῖν, to signify all the Apparatus necessary to a Physician.

CHORION, χορίον, χορίων, χορίων. The external Membrane of the Fœtus. See AMNIOS.

The Chorion is a pretty thick, strong, whitish Membrane, covered with a Multitude of Branches of Veins and Arteries. It is divisible into two Lamellæ, whereof the outermost is thick and opaque, the inner thin and transparent. Those that deny the urinary Membrane, divide it into three. See AMNIOS. *Drake's Anat. Vol. 1.*

CHOROIDES, χοροειδής, from χορίον, the Chorion, and εἶδος, Likeness, is an Epithet of several Membranes, which, on account of the Multitude of their Blood-vessels, resemble the Chorion. Thus the Plexus Choroides is a Convolution of the Membranes of the Brain, consisting of an Assemblage of Veins and Arteries. It is also apply'd to a Portion of the Pia Mater, and the interior Coat of the Eye under the Sclerotica. See CEREBRUM, and OCLUS.

CHOSNOS, χῶσνος, in *Hippoc.* πρὸς καρδίας, signifies a Funnel; but *Hen. Steph.* rightly conjectures, that it ought to be read χῶρῶς, and so it is the same as χῶανος, CHOANOS, which see.

CHOUAN. A French Name for a small Seed of a yellowish-green Colour, pretty much resembling Worm-seed, but a little bigger and lighter, and in Taste a little salt and biting. It grows on an exotic low Plant, whose Flowers are cluster'd on the Top; and is brought from the *Levant*. It enters the Composition of the Carmine. See CARMIN. *Lemery des Drogues.*

CHOYNE. An American cucurbitiferous Plant, with Leaves like the Bay-leaves, and bearing a Fruit of the Bigness of a moderate Citrus, beautiful, but not eatable, of the Figure of an Ostrich's Egg, of which the *Indians* make Drinking-cups. *Ray, Hist. 1732.*

CHREMA, χρεῖμα, in *Hippocrates*, signifies the same as πρῶγμα, that is, *Res*, or Thing.

CHRESTOS, χρεστός, from χρεῖσθαι, to use, in *Hippocrates* signifies useful, good, wholesome, fit. It is an Epithet in common Use, and applied upon every Occasion: χρεστῶς, in *Erotian*, is expounded καλῶς, "well."

CHRISIS, χρίσις, from χρίω, to anoint. An Anointing, or Inunction. See INUNCTION.

CHRISTI MANUS, literally the *Hand of Christ*, is depurated Sugar, boil'd with Rose-water, and cast into Troches, with or without an Addition of prepared Pearls. *Castellus.*

CHRISTOPHORIANA. *Herb-Christopher.*

The Characters are,

The Flowers are naked, rosaceous, pentapetalous, stellated; the Petals very subject to fall off, surrounding the Base of the Ovary, and furnished with thirty Stamina. The Ovary is soft, like a Berry, almost oval, and full of a double Row of Seeds, which, for the most part, adhere to one another. *Boerhaave, Index alter, Vol. 2.*

*Boerhaave* takes notice of four Species of this Plant.

1. Christophoriana vulgaris; nostras; racemosa & ramosa. *H. M. 2. 8. Aconitum racemosum, an Aetna Plinio? C. B. P. 183. J. B. 3. 55. 660. Christophoriana, Dod. p. 402. H. Eyt. Ait. 6. 10. F. 3. Fig. 1. COMMON HERB-CHRISTOPHER, or BANE-BERRIES.*

2. Christophoriana; Americana; racemosa; baccis rubris. *M. H. 2. 8. Aconitum baccis rubris, Corn. 77. AMERICAN HERB-CHRISTOPHER, WITH RED BERRIES.*

3. Christophoriana; Africana; ranunculoides; foliis rigidis. *Herm. M. St. Ranunculus Æthiopicus, foliis rigidis, floribus ex luteo virecentibus. H. A. 1. 1. Sphondylii, sive Panacis, rigido hirtoque folio, planta Afra caustica. Par. B. Prodr. 378. Imperatoria, ranunculoides, Africana, cuneophylla, Lajerpitii lobatis foliis rigidis, margine spinosis. Plukn. Phyt. T. 95. Fig. 2. Alm. 198. Imperatoria, ranunculoides, Sphondylii hirsuto folio, minor. Mantiss. 108. II.*

4. Christophoriana; arbor aculeata, Virginienfis, Plukn. Phyt. T. 20. Fig. 1. *Angelica arborefcens, spinosa. H. A. 1. 89. Arbor, Indica, Fraxini folio, cortice spinoso, Raii II. 1798. Angelica, arbor. Vulgo. H. Boerhaave's Index alter Plantarum, Vol. 2.*

CHRISTOS, χρεστός, from χρίω, to anoint, signifies whatever is applied by way of Inunction. *Castellus.*

CHROMA, χρώμα, in *Hippocrates*, signifies both the Colour of the Body or Skin, and the Superficies of the Body or Skin itself.

CHROMA.



**CHROMATISMUS**, *χρωματισμός*, from the preceding Word, is a Colouring, or a natural or artificial Way of communicating a Colour. *Castellus*.

**CHROMIS**, *χρῶμις, χρῶμις*. The Name of a Rock-fish good to eat, described by *Aldrovandus, de Pisc. L. 2. C. 11.*

**CHRONICUS**, or *Chronius, χρονικός, χρόνιος*, from *χρόνος*, Time. Chronical. Diseases which continue a long time, generally without a Fever, are called by this Appellation, in order to distinguish them from those which proceed with Rapidity, and terminate soon, which are call'd *Acute*.

If Health consists in a free and uninterrupted Circulation of the vital Juices thro' the Vessels, and a Disease in an Interruption of this Circulation, we may conceive, that an acute Distemper arises, when many and extensive Obstructions occupy a great Number of the Vessels all on a sudden; for then the usual Quantity of Blood is impel'd thro' a smaller Space, and returns sooner to the Heart; in consequence of this the Contractions of the Heart are more frequent, the Velocity of the circulating Juices is greater, the reciprocal Action betwixt the Solids and Fluids is increased, and consequently the Heat of the Body.

But when Obstructions are form'd by Degrees, and by little at a time, however extensive they may become ultimately, no such sudden Alteration is induced; but the vital Powers, perhaps, by discharging out of the Body a Portion of the superfluous Juices, find a way of preserving the Equilibrium betwixt the Solids and Fluids, and of adapting the circulating Fluids to the Capacity of the pervious Vessels, without raising a Degree of Fever, sufficient to impart the Name of Acute to the Disorder.

Chronical Diseases, then, may be said to be produced in the Body, by some Peccancy in the Juices, either contracted insensibly, and by degrees, or else left by some acute Distemper ill cured.

This Peccancy, contracted insensibly, and by degrees, arises,

*First*, from Things taken into the Body, as Air, Meat, Drink, Spices, Medicines, or Poisons, which are of a Nature different from that of our Juices, and so strong, as not to be capable of a due Assimilation by the Force of the vital Powers. This Peccancy of the Humours consists,

1. In Acidity. See *ACIDA*.

2. In Austerity, form'd by the Union of an Acid with terrestrial Particles; such as is discover'd in unripe Fruits, astringent Juices, austere Wines, and Things of the like Nature, which, by coagulating the Juices, and contracting the Diameters of the Vessels, create Obstructions. The Disorders hence produced are to be cured by diluting Remedies, fix'd Alcalis, and saponaceous alkaline Medicines, persisted in for a long time, and exhibited with due Caution.

3. A pinguious aromatic Acrimony, produced by Meats, Drinks, or Spices, which are hot to the Taste and Smell. These produce Heat and Attrition, and injure the fine Capillary Vessels: Hence also burning Pains, and Attenuation, Putrefaction, and Extravasation of the Juices, with many other similar Effects. This Species of Acrimony is cured by aqueous, farinaceous, gelatinous, and acid Medicines.

4. In a pinguious inert Acrimony, arising from a too liberal Use of the Fat of Land Animals, of Fish, or of oleous Vegetables. Hence Obstructions, a bilious Rancidity, Inflammation, Corrosion, and the very worst Sort of Putrefaction. This is cured by diluting, saponaceous, and acid Remedies.

5. In a salt muriatic Acrimony, generated by Sea-salt, and salted Aliments. This destroys the Vessels, dissolves the Fluids, and renders them acrid: Hence Atrophies, Dissolutions of the Vessels, and Extravasations of their Fluids, which are, by means of the Salt, preserved from a speedy Putrefaction; but, instead of this, appear in Blotches, and other scorbutic Appearances. This Acrimony is cured by fresh Water, vegetable Acids, or a Lixivium of Quick-lime.

6. In an alkaline Acrimony. See *ALCALI*.

7. In a Viscidity, or Glutinousness.

*Secondly*, A Peccancy in the Humours may arise from too strong an Action of the vital Powers upon the Things taken into the Body. See *STRICTURA*.

*Thirdly*, Such a Peccancy may arise from a spontaneous Degeneracy of our Humours, which generally happens, when they stagnate by any Cause, whatever. See *ACIDA*, and *ALCALI*.

The Humours, in any Part of the Body, may be vitiated by acute Distempers ill cured. Thus,

1. Purulent Matter may be communicated to the Humours from an Abscess, and cause purulent and hectic Fevers, and other Disorders. See *ANSCENSUS*.

2. Ichor may be communicated to the Humours from Ulcers, which may corrode and consume the Solids, and affect the Fluids.

3. Putrefactions of the Viscera may lay a Foundation for chronical Disorders.

Acute Diseases, ill cured, may also affect the solid and com-

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pound Parts of the Body, and produce chronical Distempers, by leaving Abscesses, Fistulas, Empyemas, Scirrhuses, Cancers, and Caries, which, as they affect different Parts, produce various chronical Disorders.

Many of these Causes, above recited, may concur to produce complicated chronical Diseases, which are much more difficult of Cure as they are more complex. If, however, we are well acquainted with the particular Causes which lay a Foundation for the Distemper, the Method of Cure will be less intricate; and it will be found, that a less Variety of Medicines, than is generally apprehended, is sufficient for the Cure of chronical Distempers, when they are by any means to be relieved, notwithstanding the infinite Variety of Symptoms, which arise from the original Cause, tho', in itself, not very complex.

As particular chronical Distempers are treated of under their Names, it would be superfluous to say more on these Disorders in general.

**CHROS**, *χρῶς*. The Ionians, as *Galen* says, *Com. 2. in Lib. de Tract.* by this Term *χρῶς*, understood whatever is carnos in the Body, of which Kind are principally the Skin and Muscles, and after them the Membranes and Viscera; but they never call the Bones by this Name, nor the Cartilages, nor Ligaments.

**CHRYSALIS**, **AURELIA**, **NYMPHA**, are Names by which Naturalists call the Worm or Maggot; while it lies hidden under a pretty hard Pellicle; which is, for the most part, of a bright Yellow, or Gold Colour, (whence the Names *Chrysalis* and *Aurelia*) almost without Motion, till it comes forth a Butterfly, or some other winged Insect. *Rieger*.

**CHRYSALITES**. A figured Stone, of a glittering Gold and Iron Colour, like the Ammonis Cornu, hard, and rough, with Multitudes of circular Striae, and furnish'd with three or four Circumgyrations, resembling in some measure the *Chrysalis*. *Rieger*.

**CHRYSANTHEMOIDES**. Hard-seeded *Chrysanthemum*, and **CHRYSANTHEMOIDES**.

The Characters are;

The Leaves grow scattering; the Flower is like that of the small Sun-flower. The Calyx is simple, divided at the Base in one of the Species, and squamous in the other. The Ovary becomes a Stone, containing a hard Kernel, each Flower producing an Ovary, as in others of a like Kind. *Boerhaave's Ind. alter, Vol. 1.*

*Boerhaave* mentions three Species of this Plant.

1. *Chrysanthemoides*; *osteospermum*; *Africanum*; *odoratum*; *spinosum*; & *viscosum*. *H. A. 2. 85.* *Chrysanthemi flore planta Afra, Baccifera, ramis in aculeum acutibus*. *Par. Bat. App. Chrysanthemum Africanum, frutescens, spinosum. Volk. 105. Huic Calix simplex. H. R. D. AFRICAN SWEET-SCENTED HARD-SEEDED CHRYSANTHEMUM, WITH PRICKLY BRANCHES, AND VISCOUS LEAVES.*

2. *Chrysanthemoides*; *osteospermum*; *Africanum*; *arbo-reum*; *foliis populi albæ*. *Chrysanthemum arborescens, Æthiopium, foliis populi albæ*. *Breyn. Cent. 156. M. H. 2. 23. Chrysanthemoides Africanum, populi albæ foliis. T. Mem. Ac. Reg. 1705. Chrysanthemum bacciferum, populi folio, Africanum. Ind. 278. Huic Calix squamosus triplici serie. H. R. D. AFRICAN HARD-SEEDED TREE CHRYSANTHEMUM, WITH LEAVES LIKE THE WHITE POPLAR.*

3. An *Chrysanthemoides*? quod *Chrysanthemum* ex *Insulis Caribæis* *Leucoji* *incanis* & *sericeis* *foliis*, *argenteis*, *crassij. Pluk. Phyt. 115. 4. H. R. D. HARD-SEEDED CHRYSANTHEMUM, FROM THE CARIBBEE ISLANDS, WITH THICK WHITISH LEAVES. Boerhaave's Ind. alter Plantarum, Vol. 1.*

**CHRYSANTHEMUM**.

The Characters are;

The Root perishes every Year. The Calyx is hemispherical and squamous; and the Rays of the Flower are, for the most part, of a Gold Colour. *Boerhaave, Index alter, Vol. 1.*

*Boerhaave* mentions seven Species of this Plant.

1. **CHRYSANTHEMUM**, *Offic.* *Chrysanthemum foliis Matricariæ*, *C. B. 134.* *Raii Hist. 1. 340. Tourn. Inst. 491. Elem. Bot. 393. Boerh. Ind. A. 105. Chrysanthemum veterum seu majus folio valde laciniato, Chab. 359. Chrysanthemum majus folio valde laciniato flore croceo, J. B. 3. 104. DIOSCORIDES HIS CORN-MARYGOLD.*

It is cultivated, tho' but rarely, in Gardens; and flowers in Summer. The Flowers are used in Medicine; and, being bruised with Cerate, are said to discuss a *Scatoma*. *Dale* from *Dioscorides*.

2. *Chrysanthemum*; *folio Matricariæ*; *flore luteo*, pleno. **THE DOUBLE YELLOW CHRYSANTHEMUM, OR CORN-MARYGOLD.**

3. *Chrysanthemum*; *flore partim candido, partim luteo*. *C. B. P. 134. WHITE CORN-MARYGOLD, OR CHRYSANTHEMUM.*



4. Chrysanthemum; folio Matricariæ; flore albo, pleno. *H. C. a.* THE DOUBLE WHITE CHRYSANTHEMUM, OR CORN-MARYGOLD.

5. Chrysanthemum; folio Matricariæ; floris radiis sulphureis, disco aureo. *a.*

6. Chrysanthemum; folio Matricariæ; flore magno, bullato, serè nudo. *Chrysanthemum, Creticum, apetalon.* Bobarl. *An Chrysanthemum, Creticum, petalis florum fistulosis.* T. 491.

7. Chrysanthemum; folio latiori Matricariæ; flore magno, sulphureis radiis, disco aureo. *a.*

8. Chrysanthemum; folio latiori Matricariæ; flore aureo. *a.*

9. Chrysanthemum; segetum; facie bellidis sylvestris; foliis glaucis, papaveris hortenlis instar profundè incisis. *H. L.* 145.

CHRYSANthemum SEGETUM, Ger. descript. 604. Emac. 743. Rali Synop. 3. 182. Hist. 1. 339. *Chrysanthemum segetum vulgare glaucum*, Hist. Oxon. 3. 15. *Chrysanthemum segetum nostras*, Park. Theat. 1370. *Chrysanthemum folio minus secto glauco*, J. B. 3. 105. Tourn. Inst. 492. *Chrysanthemum arvense folio glauco dentato*, Rupp. Flor. Jen. 136. *Bellis lutea foliis profunde incisis majus*, C. B. Pin. 262. CORN-MARYGOLD.

It is frequent among the Corn: The Flowers are in Use, which are extol'd by the Germans, as an extraordinary Remedy for the yellow Jaundice. *Dale.*

10. Chrysanthemum; segetum; facie bellidis sylvestris; foliis glaucis, papaveris hortenlis instar profundè incisis; minus. *H. L.* 145. *Bellis lutea, foliis profundè incisis, minus.* C. B. P. 262. *a.*

11. Chrysanthemum; folio glauco, minus secto; flore ex albo & luteo variegato. *a.*

12. Chrysanthemum; Bellidis majoris folio viridi. *Flor.* 1. 34. *Bellis, lutea, foliis subrotundis*, C. B. P. 262. *Chrysanthemum Myconi.* Lugd. 873. *Chrysanthemum, latifolium.* J. B. 3. 105. *a.*

13. Chrysanthemum; Bellidis majoris folio viridi; minus. *a.*

14. Chrysanthemum; pallidum; minimis imisque foliis incisis, superioribus integris & capillaribus. *Barr.* 1. 421. *Obs.* 1093. *a.* *Boerhaave's Index alter Plantarum, Vol. 1.*

CHRYSATticum. An Epithet of a sort of *Passum*, recommended by *P. Ægineta*, *Lib. 3. Cap. 50.* to be drank, with the Seed of *Atriplex*, for the *Icterus*, or yellow Jaundice.

CHRYSE, χρυσή. The Name of a Plaister in *P. Ægineta*, *Lib. 7. Cap. 17.* for recent Wounds. It consists of Frankincense, and plumous Alum, each two Ounces; Colophony, Rozin, each one Pound; Oil, three Ounces; Orpiment, two Ounces. The Orpiment to be triturated in Vinegar.

CHRYSIscEPTrum. A Name, in *Blancard*, for the white *Chamaelon*.

CHRYsITIS SPodos, χρυσίτης σποδος, in the spurious Additions to *Hippocr. περί γυναικ.* *Lib. 1.* is the Ashes of *Spuma Argenti*, and recommended in ophthalmic Cases. *Chrysitis, χρυσίτης*, in *Dioscorides*, *Lib. 5. Cap. 102.* is one of the three Species of *Spuma Argenti*, or Litharge, so call'd from its yellow Colour, resembling that of Gold.

CHRYSOBALANUS, χρυσοβάλλανθρον. A Drug mention'd by *Galen*, *de C. M. S. L. Lib. 8. Cap. 3.* but not certainly known to the Moderns. *Baobine*, in his *Pinax*, supposes it, after others, to be the Nutmeg.

CHRYSOCALLIA. A Name in *Dioscorides*, as *Oribasius* reads it, instead of the vulgar *Chrysocoma*, for the *Anthemis*, or *Chamaemelum*.

CHRYSOCERAUNIUS, χρυσοκεραυνός. The same as *CERAUNIOCHRYsos*, or *Aurum fulminans*.

CHRYSOCHALCOS, χρυσοχαλκός. The same as *Aurichalcum*. *Rulandus*. *Johnson*. It is also called *Orichalcum*.

CHRYSOCOLLA. The same as *BORAX*, which see.

CHRYSOCOME, χρυσοκόμη, from χρυσός, Gold, and κόμη, Hair, is a Name for many Species of the *HELICHRYSUM*, which see.

CHRYsODENDRON. See *CONOCARPUS DENDRON*.

CHRYsOGONIA, χρυσογονία, from χρυσός, Gold, and γίνομαι, to be made or generated of, is the aurific or Gold-making Seed, most perfectly concocted from a Solution of Gold; or the aurific Tincture, of a red Colour, endued with an admirable Fineness of Substance, and with a natural aurific Virtue, as the *Argyrogonia* is with an argentific one. *Theat. Chym.* Vol. 2.

CHRYsOGONUM, Offic. Park. Theat. 683. Rali Hist. 2. 1326. Hist. Oxon. 2. 285. *Chryzogonium Dioscoridis quibusdam*, J. B. 3. 489. Chab. 486. *Chryzogono di Dioscoride*, Pon. Ital. Bald. 141. *Leontopetalon affinis foliis Quernis*, C. B. Pin. 324. *Leontopetalon foliis costæ simplicis innascentibus*, Tourn. Coroll. 49. RED TURNEP.

It grows in *Syria*; and the Root, which is the Part used in Medicine, is good against the Bites of Serpents, being endued with a digestive, drying, and heating Quality. *Dale.*

CHRYsolACHANON. A Plant mention'd by *Pliny*. *Rieger* suspects it to be *Mercury*.

CHRYsolITHUS, Offic. Charlt. Foss. 39. Mont. Exot. 14. *Chrysolithus Modernorum*, Worm. 106. *Topazius Veterum, quem recentiores perperam vocant Chrysolithon*, De Laet. 46. *Topazius Veterum*, Boet. 207. *Topazius*, Aldrov. Mus. Metall. 976. *Topazius, sive Chrysolithus*, Geoff. Prælect. 82. THE CHRYSOLITE.

This is a green diaphanous Gem, of a glittering Splendor, like Gold. It is found in *India*, and other Countries; and is endued with the Virtue of stopping Hæmorrhages, and of mitigating Bile, Anger, and Phrensies. *Dale* from *Boet*.

CHRYsOPASIUS. *Topazius, & Chrysopasius*, Offic. *Topazius*, Charlt. Foss. 39. *Topazius Neotericorum; Veterum Chrysolithus*, Worm. 106. *Topazius*, Schw. 406. Kentm. 47. *Chrysolithus Veterum*, Boet. 210. De Laet. 49. Mont. Exot. 14. *Chrysolithos*, Schrod. 327. *Chrysolithos, sive Topazius*, Geoff. Prælect. 82. *Chrysolithus*, Vet. THE TOPAZ.

It is a diaphanous and pellucid Stone, of the Colour of Gold, and is supposed to be of a solar Nature from its Signature; for which Reason it is believed to strengthen the Mind against nocturnal Fears, to diminish Melancholy, to prevent troublesome Dreams, and to work other such good Effects. *Dale* from *Schroder*.

These Virtues are utterly superstitious. CHRYsOPLYCIUS PULVIS. A sort of Powder mention'd by *Helmont*, *Nat. cont. Nesc. Tit.* 40. which, he says, procures Hardness to Lead, and Difficulty of Liquefaction to Tin and Mercury, but deprives Iron of both these Qualities.

CHRYsOPCEIA, χρυσοποίη, from χρυσός, Gold, and ποίω, to make, is that Part of the spagirical or chymical Art, which teaches the making of Gold out of more imperfect Metals, by Help of the *Mercurius Philosophorum*.

CHRYsOPUS, χρυσωπός. A Name for the *Indian* purging Juice, otherwise call'd *Gummi Gotta*. *Castellus*.

CHRYsOS. See *AURUM*.

CHRYsOSPLENIUM, Golden Saxifrage.

It has a fibrous perennial Root: The Leaves are semiorbicular; the Cup of the Flower, which, according to *Tournefort*, is to be taken for a Flower, is divided into four, seldom into five Lobes. The Flower is apetalous, and furnish'd with eight Stamina, which grow round the Margin of the Ovary. The Fruit is a bivalve, fork'd, membranaceous Capsule, with only one Cell, containing many Seeds.

*Boerhaave* mentions two Species of this Plant.

1. *Chrysofplenium; foliis amplioribus, auriculatis.* T. 416. *Saxifraga, rotundifolia, aurea.* C. B. P. 309. *Saxifraga, aurea.* Dod. p. 316. J. B. 3. 707. H. Fyft. Hyem. F. 6. Fig. 5. *Alchimilla, rotundifolia, aurea, hirsuta.* H. L. 14. H. GOLDEN SAXIFRAGE, WITH LONG-EAR'D LEAVES.

2. *Chrysofplenium; foliis minoribus, subrotundis.* T. 146. *Saxifraga, rotundifolia, aurea, minor, montis aurei.* H. R. Par. H.

*Boerhaave's Index alter Plantarum, Vol. 2.*

CHRYsulCA. An Epithet in *Helmont*, and some others, for *Aqua Stygia*, or *Aqua Regia*.

CHRYsUN, χρυσόν, from χρυσός, Gold. An Epithet of two Collyria for the Eyes, and also of two Pessaries for the Uterus, in *Actius*.

CHU, CHUS. A Measure. The same as *CHOA*, which see.

CHYBUR, CHIBUR, in the Language of *Paracelsus*, is Sulphur. *Castellus*.

CHYLARION, χυλάριον. A Diminutive of χυλός, Chylus, Juice, or Liquor, and render'd by *Foesius*, in *Hippocr. de intern. Affect. Succatiuncula*, where he observes, that all the Copies, instead of χυλαίον, by a gross Mistake, read χαλαίον.

CHYLIFICATIO, CHYLOSIS, χύλωνσις, χυλοποίησις. The Act of reducing the Aliment in the Stomach to Chyle. It is commonly call'd *Coctio prima*, "the first Concoction." See *CHYLUS*.

CHYLISMA, χύλισμα, from χυλίζω, of χυλός, Juice, in *Dioscorides*, *Lib. 3. Cap. 125.* signifies express'd Juice.

CHYLOSTAGMA *Diaphoreticum Mindereri*, call'd also *Aqua Theriacalis Bezoardica* in the *Ausburg* and *Straßburg* Pharmacopœias, is a Liquor distill'd from the *Theriaca Andromachi*, the *Mithridate* of *Damocrates*, and a pretty many other heating Vegetables, commonly call'd *Alexipharmacs*, with the Root of *Tormentil*, the Bark of *Ash*, the middle Rind of *Elder*, the Juices of unripe Walnuts, Limes, and Sorrel, and the Vinegars of Raspberries, Elder, Roses, and Rue. In the *Brandenburgh* Dispensatory, you have it under the Title of *Aqua Theriacalis composita seu Bezoardica*, but with some Alterations.

The



The *Aqua Theriacalis Bezoardica* of the *Copenhagen Dispensatory* seems design'd for an Emendation of the same. *Rieger*.

**CHYLUS**, *χυλός*, in general, signifies a Juice and Humour incrassated by Heat, and of a middle Consistence between humid and dry. But *χυλός*, in *Hippocrates*, is used simply to signify the Juice and forbile Liquor of Ptisan or Barley, which Liquor they call strain'd Ptisan, being the express'd Substance of the Barley; not what the *Latins* call *Cremor*, which is only the express'd Water of the Barley. To *χυλός* is oppos'd *whole* and *entire*, that is, not strain'd Ptisan. See our Translation of *Hippocrates de Rat. Viét. in Morb. acut.* under the Article **ALCALI**.

**CHYLUS.** The Chyle.

Aliments of every Kind, whether solid or fluid, are, not only in the Stomach, but also in the Duodenum, which is a Kind of succedaneous Stomach, and in the Whole of the small Intestines, by the Warmth of the Parts, and the Assistance of the gastric Lymph and Bile, dissolv'd and converted into an alimentary Liquor called *Chyle*, which being secreted thro' the Intestines, from the recrementitious Mass of Aliments, to be discharg'd by way of Excrements, is by a peculiar Mechanism convey'd to the Mass of Blood.

That the Duodenum is a succedaneous Stomach, is obvious from this, that it is sufficiently large, and has a Flexure like that of the Stomach, by means of which, the Mass of Aliments may be the longer retain'd in it. It is also furnished with Menstruums, or solvent Liquors peculiar to itself; since not only a large Number of small Glands detected by *Brunnerus*, and which discharge a menstruous Lymph, are situated in it; but also because the pancreatic Juice, mixing with the Bile, accomplishes the farther Elaboration and Rectification of the Chyle.

The Chyle itself is a milky insipid Liquor, consisting of oleous and mucilaginous Parts, and extracted from the dissolv'd Aliments.

The Chyle is, as it were; a natural Emulsion; and as, in order to constitute this, a Mixture of oleous and aqueous Parts is requisite; so, that Chyle consists of the same Ingredients, is obvious from those Parts, which in Milk, which is nothing but Chyle, are converted into Butter, Cheese, and Serum: And as every artificial Emulsion, prepar'd with Water and oleous Seeds bruis'd, is of a whitish Colour, which arises from the Oil reduc'd to small Globules reflecting the Rays of Light; so also the Whiteness of the Chyle can hardly be ascrib'd to any other Cause than this.

*Boerhaave* has set the Analogy betwixt Emulsions of Vegetables and Chyle in a very clear Light. He speaks only of vegetable Substances; but if we reflect; that Animal Substances; taken by way of Aliment, are originally form'd from Vegetables, and, like them, consist of Oil; Earth, Water, and Salts, (the last Volatile) we shall readily conceive; how the Organs of Digestion convert, also, Animal Substances into Chyle; or a sort of Emulsion.

The Passage hinted at in *Boerhaave* runs thus:

1. If the oleaginous Vegetable Substances are reduc'd to a Powder, or bruis'd, and ground in a Marble Mortar with a Wooden Pestle, and a little Water slowly and successively poured upon them in the Grinding, that they may then come into a well-wrought Paste, they will change into a white Mass; which the longer it is so ground, the more uniform it becomes, and the better fitted for this Process. 2. Then gradually add more fair warm Water, so as to make the Whole fluid, and continue the Triture without Intermission, as before; whereby the Liquor, floating above the Matter, will begin to grow milky and unctuous: Let the Liquor now rest a little, then pour it off by a gentle Inclination of the Mortar upon a thin Linen Strainer, that the finer Part may pass thro' into a clear Vessel. 3. To the gross Part remaining behind in the Mortar, and in the Strainer, again add fresh Water, and grind and strain as before, adding this second Liquor to the former, and repeat this for several times, till the Liquor poured off gradually becomes less white, less thick and unctuous, and at length perfectly aqueous; at which Time but a very little of the Subject will remain in the Mortar, and that chaffy, poor, exhausted, and insoluble in Water, tho' assisted by long Triture, appearing almost merely terrestrial, without Salt, or the least Signs of Oil: Whence, by this means, the Parts of Vegetables, fill'd with Oil, are divided into two distinct Kinds; the one dissolvable by Water, the other not.

The Liquor, thus prepar'd, resembles in many respects the Chyle of Animals, which is itself prepar'd from Vegetables in their Bodies, by chewing, ruminating, and the Action of the Stomach, before it is mix'd with the Bile in the Duodenum. The Thing appears plain from the white Colour, the mild Odour, the sweet Taste, the thick Unctuousness, and the great Disposition they both have to turn sour. So likewise, if the Liquor, thus prepar'd, stand some time in a tall cylindrical Vessel, it spontaneously separates into a white, thick, and almost totally oily Part, which floats at Top, and into a thinner,

transparent, bluish Liquor, which remains below; wherein it perfectly resembles Milk, as dividing itself into Cream, and thin Milk. Again, if this Liquor be kept for some time in a warm Air, it turns sour, and afterwards considerably sharp, tho' without acquiring the proper Rancidness of an express'd Oil, in which respect also it perfectly agrees with Milk, which acquires the like Acidity in such an Air, without becoming rancid like pure Oil: Whence this farther Remark should be made, that in acute Distempers Emulsions may be given with greater Safety than express'd Oils. But I could never, by any Art of Coagulation I have us'd, obtain a Curd from this Liquor, as Milk affords; whence there is this Difference betwixt the Milk of Vegetables and Animals. The Reason of the Difference betwixt express'd Oils and Emulsions seems principally this, that the mealy Part in the Grinding being constantly in fine Particles interposed betwixt the pure Oil, the Parts of this Oil are so broke and separated from one another, that its Tenacity being chang'd, it becomes miscible with Water, and thence appears in the Form of Milk, which also consists of a fat Substance dissolv'd in Water; whereas, when a pure Oil is obtain'd by Expression, the Parts thereof, being in Contact with each other, do not admit of Water, nor suffer it to be mix'd among them. Again, the large Quantity of Meal, intermix'd amongst the Oil in the Emulsion, causes it to turn sour, not rancid; and hence appears the Reason why the Liquor is white; for Whiteness always ensues, as often as Oil is intimately divided and mix'd with Water. If Oil be poured upon a Glass of Water, the two Liquors will remain transparent and separate; but if shook briskly together, they will unite in some measure, and; during that Union, the Mixture will appear perfectly white; but if now suffer'd to rest, the Oil collects at the Top, the Water sinks to the Bottom, and the Whiteness immediately vanishes: And the same Thing frequently happens in Animal Milk, distilled oleaginous Waters; and these Emulsions. It is also certain, that the Whiteness becomes greater, the larger the Quantity of Oil; and, in this Case, the Liquor sooner grows rancid; but the less the Oil, the less white the Liquor, and the sooner it turns sour. In the Summer Emulsions will scarce keep ten Hours, but in the Winter longer. To conclude, this Method of making Emulsions gives Light to the Action of Mastication; for all the Foods prepar'd from Corn, abounding with a latent Oil, and being ground by the Teeth in chewing, and mix'd with the Saliva, the longer they are thus acted upon in the Mouth, the nearer they approach to these Emulsions, and at length always turn white, when the Saliva, Salt, and Oil, are well ground together. The Operation, thus begun in the Mouth, is carry'd on in the Stomach, and more perfected in the Intestines, where the Matter still retains the same Nature, except that new Juices are perpetually mixing themselves therewith, and communicating their Properties; whereas, in our pharmaceutical Operations, there is no Addition but of Water alone. And hence we may understand the artificial Distinction between the first Chyle, and the Milk of Animals.

Hence we also learn the Origin of the Fat in Animals, which feed upon Vegetables; since Vegetables constantly abound with Oil, which may be prepared and extracted from them by chewing, ruminating, and the Power which the Body has of making the Chyle. 2. We hence see the Nature and Use of this Oil in Plants. 3. So likewise we learn the Manner, whereby a Liquor, extremely like Chyle and Milk, may be produced from Oil and Water mix'd and ground together in a certain manner, and hence perceive how the human Body acts in producing Chyle and Milk. 4. Hereby we are orderly led to consider those Oils call'd essential. 5. Physicians acquainted with these Particulars will not wonder, whence Men in Health, who use little Exercise, should abound in Fat, even tho' they often use nothing but vegetable Food; since Expression and Emulsion can so easily extract a large Quantity of Oil from Vegetables not apparently oily. 6. Hence we see the Origin both of Chyle and Milk; and, 7. The Nature of those Principles which constitute them both; which are the Animal Juices, consisting of the Saliva, the fine anterior Dew, the Mucus of the Mouth, Jaws, Gullet, Stomach, and Intestines; and again, of those aqueous, saponaceous, oily, and spirituous Matters, in the Liquors enumerated, which may be brought into the Form of an Emulsion, and expressed from the grosser Parts, by the means of Mastication, Deglutition, the Action of the Stomach, and the peristaltic Motion. 8. Hence also may be easily deduced the physical Reason, why the Milk of Animals, prepared entirely from vegetable and tartish Food, is so subject to turn sour, when out of the Body. Recent verdant Grass, by being long masticated, or ruminated, with a large Proportion of Saliva, begins even in the Mouth to assume the Form of Milk, and promote the Production of Fat: Whence Men usually grow fat with Bread and Water, and Cattle with Water and Grass.

Since the principal Element of the Chyle is an Oil, blended with a mild, gelatinous, and mucilaginous Substance, 'tis obvious that those Substances afford the most copious and laudable



able Chyle, which are furnished with a mild, oleous, and mucous Juice, such as the Fleſhes of Animals, and, in the Vegetable Kingdom, all the farinaceous Seeds.

Hence the Reaſon is plain, why a Man may live upon Water and Bread alone; for theſe Subſtances include, in a due Degree and Proportion, all the Ingredients of the Chyle and Blood. From this it alſo appears, why, in the Eaſtern Countries, Rice ſerves the Inhabitants inſtead of Bread, and why by the Uſe of Barley, Wheat, Oats, Peaſe, Beans and Cheſnuts, not only Men, but every other Species of Animals, become fat. Hence alſo the Reaſon is obvious, why thoſe Aliments which are not of a temperate Quality, ſuch as acid, ſpirituſous, and ſaline Subſtances, the Juices of many Vegetables, Herbs, Roots, with acrid and aromatic Subſtances, are improper for producing Chyle, and carrying on the Work of Nutrition.

The Chyle, extraſted from the diſſolved Aliments, is ſtrain'd thro' the villous Coat of the ſmall Inteſtines, convey'd to the ſmall Mouths of the lacteal Veſſels, and poured into them.

This villous Coat, which is moſt conſpicious in the Jejunum, is no more than a Congeries of a large Number of villous Subſtances, or ſmall Tubes variously interwoven with each other; and this Congeries is the Source and Origin of the lacteal Veſſels.

That the *Villi* of the Inteſtines are furniſh'd with Cavities obſervable by Microſcopes, is excellently demonſtrated by *Brunnerus*, in his *Treatiſe de Glandulis Inteſtinarum*. From the ſame Author we learn, that where there are inteſtinal *Villi*, there are alſo lacteal Veſſels; and that where the former of theſe are not to be ſeen, as in the Stomach for Inſtance, there the lacteal Veſſels are inviſible.

The villous Coat of the Inteſtines is not merely paſſive, but, in conſequence of the Afflux of the nervous Fluid and Blood, is furniſh'd with a certain Degree of Strength and Tone, or a Motion by which it is contracted and dilated; ſo that theſe ſmall villous Canals, and the Orifices of the lacteal Veſſels, may be either too much contracted, or too much relaxed.

In Spasms and Gripes of the Inteſtines, as alſo upon the Uſe of acrid Purgatives, or corroſive Poisons, this villous Coat is highly conſtricted; ſo that nothing, except a fine thin Fluid, is paſſ'd thro' it, as is ſufficiently evinced by the Symptoms common to hypochondriac Patients, and by the Flatulences and Congeſtions of peccant Humours uſual in ſuch a Caſe.

The villous Coat, with which the ſmall Inteſtines eſpecially are furniſh'd, is that common Strainer, thro' which all the Liquor is convey'd from the *Primæ Viæ* to the Blood, and all the other Parts of the Body; Hence 'tis of the utmoſt Importance, that this villous Coat ſhould be in its due and natural State; for if the Mouths of the Veſſels are too wide and pervious, the groſs, ſeculent, and recrementitious Parts of the Chyle are convey'd to the Blood. If, on the contrary, they are too much contracted, the thin and watery Part of the Chyle is only convey'd to the Blood, whereas the more uſeful and alimentary Parts of it are kept back.

Since all the Chyle, and every other Fluid, muſt paſs to the Maſs of Blood thro' the minute capillary Veſſels of this villous Coat, and thro' the lacteal Veſſels, hence theſe Duſts, and other Orifices, ought to be open and pervious, but not obſtructed with any mucous Subſtance.

To obſtruct theſe ſmall Duſts of the villous Coat, thoſe Aliments greatly contribute, which are converted into a viſcid Coagulum, ſuch as hot Bread, farinaceous Subſtances, and Cakes not ſufficiently fermented, conſolidated Milk, viſcid and compact Aliments, Fats, which eaſily run into a Coagulum, ſuch as that of Sheep; together with all Aliments and Medicines poſſeſſed of an aſtringent Quality.

Bountiful Nature has therefore wiſely appointed, that the Bile, in conſequence of its ſaponaceous and abſtergent Quality, and the Lymph, in conſequence of its being inceſſantly diſcharg'd from the Glands and glandular Coats, ſhould preſerve this villous Coat from being obſtructed by a thick and viſcid Mucus.

Hence the Reaſon is plain, why the drinking good Waters, warm Infuſions of Tea and Coffee, together with Decoctions of Herbs, is ſo highly beneficial, ſince the principal Advantage, attending the Uſe of theſe Liquors, conſiſts in this, that they keep this Coat free from Obſtructions, and preſerve its Duſts open and pervious. Hence alſo the Reaſon is obvious, why theſe Liquors, or any whoſome Water, drank copiouſly, when, in conſequence of the obſtructed Veſſels, they cannot find a free and eaſy Paſſage, excite Commotions, Flatulences, Uneaſineſs, and ſometimes Vomiting. Warm Fluids, however, drank in too large Quantities, and too frequently repeated, will relax the villous Coat, and prove highly prejudicial.

Thro' the villous Coat of the Inteſtines there is, firſt of all, ſecreted from the Aliments, a highly fine Fluid, which eaſily enters and paſſes thro' the ſeveral Duſts. Hence, after Meals, or drinking liberally, even of good Water, the Urine is firſt

diſcharged purely aqueous and inſipid, but afterwards aſſumes a deeper Colour.

The more groſs and coarſe Parts of the Aliments, which are not adapted to the Mouths of the lacteal Veſſels, are not conveyed to the Blood, but, being retain'd in the Inteſtines, in conſequence of the Narrowneſs of the Lacteals, are diſcharged by way of Excrement.

If, in conſequence of the coſtive State of the Patient, the more groſs Parts of the Aliment remain for a conſiderable time in the Inteſtines, the more groſs ſaline and terreſtrial Parts, alſo, by the ſtrong Compreſſion of the Inteſtines, penetrate into the Blood.

But a Liquor is not only ſecreted in the ſmall, but alſo in the large Inteſtines, and convey'd into the Maſs of Blood thro' the abſorbent Veſſels.

When any one is preternaturally coſtive, the Fæces which were before diſcharged liquid, and of a fetid Smell, are now deſtitute of Moiſture, dry, and free from an ungrateful Smell; which is a ſatisfactory Proof, that this fetid Liquor has been ſeparated from them.

From what has been ſaid we may eaſily aſſign a Reaſon, why a coſtive State ſhould produce a Cacoſchymy, and render the Humours highly impure. That there is alſo a Secretion made in the large Inteſtines, is ſufficiently obvious from what we call nutritive Clyſters, prepared of *Peruvian Bark*; as alſo from antiſpaſmodic and corroborating Clyſters, prepared of nervous and cephalic Herbs, and calculated for Diſorders of the Head.

The Stomach and Inteſtines have a particular Motion, by which they are contracted and dilated. This Motion proceeds gradually from the ſuperior to the inferior Parts, and is by the *Greeks* called the perſiſtaltic Motion.

The principal Inſtruments, by which this Motion is carried on and performed, are the annular Fibres, with which the whole Inteſtines are ſurrounded, and wrapt up in a ſpiral Form: So that theſe Fibres are continued in an uninterrupted Courſe from the Oeſophagus to the Anus.

This Aſſertion may be confirmed by the following Experiment. Boil the Inteſtine of any Animal, and, after ſeparating the longitudinal Fibres along with the exterior Coat, the annular Fibres, in one continued and uninterrupted Series, may be ſeparated from the Inteſtine like a long Thread. Theſe annular Fibres, with the Aſſiſtance of the longitudinal, are the principal Inſtruments, by means of which the Contraction of the Inteſtines is produc'd.

The perſiſtaltic Motion of the Inteſtines, when in its natural State, is highly eaſy, gentle, and, as it were, of the undulatory Kind.

This eaſy and gentle Motion may be juſtly look'd upon as the wiſe and bountiful Appointment of Nature, left the Aliments, when concocted, ſhould be with too much Precipitation hurried into the Inteſtines, and too ſpeedily diſcharged, which happens in a Diarrhœa. Beſides, in conſequence of the gentle Contraction and Dilatation of the Inteſtines, only the finer and more ſubtile Portion of the Chyle is ſeparated from the Maſs of digeſted Aliments, and poured into the villous Duſts of the Inteſtines, and the Mouths of the lacteal Veſſels; whiſt, at the ſame time, the more groſs and ſeculent Parts are left, juſt as happens in all Percolations, where the Strainer, upon a gentle Compreſſion, only tranſmits the finer Parts of the Liquor, whereas, by a ſtronger and more forcible Compreſſion, its thick and turbid Parts are at the ſame time paſſed thro' it. But this Motion of the Inteſtines, ſubſervient to the progreſſive Motion and Expulſion of their Contents, is ſo eaſy and gentle, that it is not perceptible, except in the larger Animals, ſuch as Oxen and Horſes, when diſſected alive.

As every Impulſe, and progreſſive Motion of Humours, require a Cauſe or Principle ſufficiently qualified for producing a due Degree of Motion, ſo, with reſpect to the perſiſtaltic Motion of the Stomach and Inteſtines, we find a threefold Cauſe, the firſt of which is lodged in the Pharynx, the ſecond in the Pylorus, and the third in the Beginning of the Inteſtinum Colon.

By a ſtrong Contraction of the Pharynx, the Aliments taken are thruſt into the Cavity of the Stomach, thro' the Oeſophagus. Then by the right and inferior Parts of the Stomach, and by the Action of the Pylorus, the Contents of the Stomach are propelled thro' the ſmall Inteſtines, till they arrive at ſuch as are larger and more capacious, where, about the right Ileum, is the Beginning of the Colon, which conſiſts of very ſtrong, nervous, muſcular, and fibrous Membranes, and by whoſe Motion and Impulſe the Excrements are forced thro' the various Convolutions of the Inteſtines to the very Sphincter Ani.

The Motion of the Inteſtines, by means of which their Contents are propelled, or carried forwards, is ſufficiently ſtrong, ſince it overcomes a conſiderable Reſiſtance, and forces Quickſilver, almoſt the heaviſt of Mineral Subſtances, up and down, thro' all their various Convolutions and Windings, till it is diſcharg'd by the Anus; which we obſerve in thoſe afflicted with the



the Iliac Passion, who often receive considerable Relief by taking large Quantities of this metalline Fluid.

This Motion, whereby the Intestines are contracted and dilated, is successive and reciprocal; for whilst one Part of the Intestine is contracted, and render'd narrower, the Substance contain'd in it is push'd forward to the adjacent Part, which by that means is dilated, and, upon the Cessation of that Dilatation, is forthwith contracted again.

As, in order to preserve the continual Circulation, and progressive Motion, of the Blood and Humours, such is the Construction of the moving Fibres in the Heart and Arteries, that their Dilatation or Diastole becomes the Cause of their Systole, which again produces their Diastole; so also the like Condition of moving Membranes and Fibres is observ'd in the Structure of the Intestines, so that their Dilatation produces their Contraction, and, *vice versa*, their Contraction proves the Cause of their Dilatation.

If then the Contraction of the Intestines is the Cause of their Dilatation, and if, on the contrary, their Dilatation gives Birth to their Contraction, it follows, that by producing either a stronger Dilatation or Contraction, only in one Part of the Stomach and Intestines, the peristaltic Motion in general must by that means be accelerated, and the Fæces of course the more speedily evacuated.

Hence the Reason may be easily understood, why by a purgative Medicine, which is frequently lodg'd in one Part of the Intestine, and excites a painful Constriction, the Contents of the Intestines are as speedily and forcibly discharged, as we observe them to be by acrid Humours in bilious Diarrhœas. Hence the Reason is also obvious, why, by drinking copiously of any Liquor which is impregnated with a stimulating, and especially a saline Principle, the Contents of the Intestines are soon expel'd, as we observe in drinking hot and acidulated Waters.

As the Strength, Tone, and contractile Force of all the moving Parts of the human Body depend upon a free and uninterrupted Influx of the fine nervous Fluid, and the purer Part of the Blood, so the peristaltic Motion of the Stomach and Intestines depends upon the same Cause.

All those Medicines, which increase the Strength, which augment and restore the Vigour and Tone of the Parts, such as Substances impregnated with a highly subtil, fragrant, oleous, and aromatic Oil; or such as contain a subtil volatile Salt, or such as abound with a mild and balsamic Resin, are excellent Preservatives of the Motion of the Intestines, and restore it when become too languid; whereas, on the contrary, Substances which impair the Strength, such as fetid Medicines, Opiates, too powerful Refrigerants, Acids, and Astringents, greatly impair the Vigour of these Parts. But that the nervous Fluid is subservient to the Motion of the Intestines, is, I think, obvious, because the Passions of the Mind, which principally act upon this Fluid, may also alter, increase, or destroy the natural Motion of the Stomach and Intestines.

The peristaltic Motion, therefore, of the Intestines is the principal Cause, both of the Secretion of the Chyle, and of its Conveyance thro' the Lacteal Vessels.

Besides, the progressive Motion of the Chyle to the Mass of Blood is not a little assisted, first, by what we call the Valvulæ Conniventes, large Numbers of which are observable in the small Intestines, which, when a Compression of the Parts is made, hinder the Chyle from slipping instantaneously by the Orifices of the Lacteals, and the intestinal Villi; for in these the Mass of digested Aliments ought to remain for some time, that the Chyle may be the better express'd from it, and convey'd purer and better into the Lacteal Vessels. Secondly, to the more easy Reception of the Chyle into the small Lacteal Vessels, and Intestinal Villi, the Narrowness of their Diameters contributes not a little, which is illustrated by that Experiment, wherein we see, that subtil Fluids spontaneously enter small and capillary Glass Tubes. Thirdly, the progressive Motion of the Chyle, and its Ascent thro' the Lacteal Vessels, and Thoracic Duct, is much assisted by the semilunar Valves, with which they are furnish'd; for these Valves consist of slender and moving fleshy Fibres, by whose Motion the Fluid is carried from one Valve to another. These Valves are also so situated, that the Chyle and Lymph may be carried upwards in a progressive Motion; but cannot regurgitate, or have a retrograde Motion. Fourthly, the Progress of the Chyle is also assisted and promoted by the Impulse of the Fibres, of which those remarkable conglobate Glands, situated in the Centre of the Mesentery, consist.

The Progress of the Chyle thro' the Thoracic Duct, and Lacteal Vessels, to the Blood, is considerably promoted by Respiration; in which there is a continual and successive Compression and Dilatation of the Muscles of the Abdomen.

Since, in Inspiration and Expiration, the strong Compression and Dilatation of the Abdominal Muscles not only forces the Aliments from the Stomach and Intestines, but also promotes the Expression of the Chyle, it is for this Reason prejudicial both to Digestion and to Health, after a liberal Meal, to

talk too loud, or to use too violent Exercise. But, four or five Hours after, when the Digestion is finish'd, Motion and Exercise are so far from being hurtful, that they are rather beneficial, as, by increasing Respiration, the Secretion and progressive Motion of the Chyle are more effectually promoted. *Hoffman, Tom. I.*

*The Course of the CHYLE into the BLOOD.*

The Chyle being thus separated from the Aliments, it is immediately propel'd into the Lacteal Vessels, and by them convey'd to the Mesenteric Glands. These Glands lie scatter'd thro' the Cellular Substance. In the natural State, these Glands are something of the Figure of Lentils, or little round Beans; some of them being orbicular, others oval, but all of them a little flattened; and, in corpulent Subjects, we find them surrounded with Fat.

These Glands are of the Number of those that Anatomists call Glandulæ Conglobatæ, the Structure of which is not as yet sufficiently known. They seem to be of a cellular Substance, surrounded by a very fine Membrane or Coat; on which, by the Help of Microscopes, we discover an Intertexture of particular Filaments, which *Malpighi* believed to be fleshy Fibres.

The nicest Anatomical Injections have not hitherto given us any Satisfaction about these Particulars; for tho' they be made with all possible Care, they always fill the folliculous Texture of these Glands: And tho', by means of these Injections, we may discover a great many Vessels, which were before invisible, we are not a whit the nearer our Purpose; because we cannot, by this Method, distinguish the Secretory, Excretory, and Blood-vessels, from each other.

Besides the Blood-vessels, which are distributed in a reticular manner in the Mesenteric Glands, and besides many nervous Filaments spread thro' them, we discover an infinite Number of small Vessels, of another Kind, running from Gland to Gland.

These Vessels are extremely thin and transparent, and furnish'd on the Inside with numerous Valves, which appear on the Outside like little small Knots, very near each other. They go out from each Gland by Ramifications, as by so many Roots, and, having form'd a small Trunk, they are again divided, and enter some neighbouring Gland, by the same kind of Ramifications by which they went out from the former.

They are term'd Lymphatic Vessels, because, for the most part, they contain a very clear limpid, tho' mucilaginous Serum, call'd Lymph by Anatomists. But as they have likewise been observed to be fill'd with a white milky Fluid call'd Chyle, they have been call'd Vasa Chylifera, or Venæ Lactææ. They have the Name of Veins, because their Valves are disposed as those of the ordinary Blood-veins; and because the Fluid, which they contain, runs from smaller into larger Tubes.

I have always divided the Lacteal Vessels into three Classes in the human Body, and sometimes into four.

They derive their first Origin from the Tunica Villosa of the Intestines, and chiefly from that of the small Intestines, by a great Number of small capillary Roots. From these Roots there arises, between the Coats of the Intestines, a Rete Mirabile, which surrounds almost the whole Circumference of the Intestinal Canal, between the muscular and external Coat.

This reticular Texture of Lacteal Vessels keeps close to the external Coat, and leaves the Canal along with it, on the Side of the Mesentery, where it forms two Planes of Ramifications, plainly distinguish'd from each other by the cellular Substance, and adhering closely to the Inside of the two Membranes of the Mesentery. In this separate State they run on the Laminae of the Mesentery, as far as the first Mesenteric Glands, where they unite again into one Plane. All this I reckon the first Class of Lacteals.

After this Union, the Lacteal Vessels are distributed almost uniformly thro' the whole Extent of the Mesentery, from its Circumference to its Origin, or Adhesion to the Vertebrae of the Back, between the Mesenteric Glands, which they join, and form frequent Anastomoses or Communications. This is the second Class.

Having pass'd thro' the Mesentery in this manner, the Ramifications begin to unite as they approach the Spina Dorſi; and consequently their Number is lessen'd, and their Size increased; and, having pass'd the last Mesenteric Glands, they terminate about the Middle of the Adhesion of the Mesocolon in small common Trunks, which receive a great Number of Lymphatic Vessels from the Glandulæ Lumbares, and others below these. This is the third Class.

A fourth Class may be made of the Lacteal Vessels of the great Intestines; of which I demonstrated several, very full of Chyle, to the Royal Academy, in an human Colon. The late M. *Mery*, a Member of the same Academy, who was not easily convinced of any thing from Observations made by others, having seen that, with the End of my Finger, I could push the white Liquor uniformly into the Colon in several Places,



Places, seem'd at first to be satisfied ; but, for his farther Conviction, he desired me to open one of these Vessels before him, with the Point of a Lancet, and to take out a Drop of the Liquor, which having laid upon the Nail of my Thumb, he was intirely convinced.

The Lacteal Vessels are not always apparent in human Subjects ; but we may see them in those that die either a violent or sudden Death, soon after a Meal ; and they remain visible, even in the Intestines, for a long time after Death, when a great Number of the Mesenteric Glands have become scirrhus, especially in Children.

It is the common Custom to demonstrate the Lacteals in living Animals, open'd about three Hours after a full Meal, especially of Milk. This is a very troublesome Way, and very often hinders us from seeing a great Part of this beautiful Phenomenon. It is much easier and better to kill the Animal, about an Hour after it has fill'd its Belly, or sooner, if the Food be liquid ; and this is the Method which I have always used, with Success, in my private Courses.

The Lacteal Vessels of the third Class, or those that lie between the Mesenteric Glands and middle Adhesion of the Mesocolon to the Spina Dorsi, run down on the Body of the inferior Aorta, between the Extremities of the small Muscles of the Diaphragm, and terminate in a kind of Cistern ; call'd by some *Receptaculum Pecqueti*, from M. Pecquet, a Physician at Dieppe in Normandy, who first demonstrated, by incontestable Experiments, this Receptacle, which had been long before discover'd by *Eustachius*.

The greatest Part of the Receptaculum Chyli lies behind the Right Portion of the inferior Muscles of the Diaphragm, on the Right Side of the Aorta, at the Union of the last Vertebra of the Back with the first of the Loins. It is a Kind of membranous Vesicle, the Conformation of which is various in human Subjects. Sometimes it is of an uniform long oval Figure, like the Vesicula Fellea : Sometimes it is divided by Strictures into several small roundish Bags, more or less flattened ; and sometimes it surrounds the Trunk of the Aorta, like a Collar.

It is composed of very thin Coats, and its Cavity is divided by small Pelliculae, or membranous Septa, the Disposition of which is irregular. It is principally round the lower Part of this Receptacle that the last Lacteal Vessels are inserted, some on the Sides, and some behind the Aorta ; and they are accompanied by numerous Lymphatic Vessels. The upper Portion is contracted between the Aorta and Vena Azygos, and forms a particular Canal, which runs up thro' the Thorax, by the Name of Ductus Thoracicus. *Winslow, Sect. 8. Numb. 208.*

#### DUCTUS THORACICUS.

The Thoracic Duct is a thin transparent Canal, which runs up from the Receptaculum Chyli, along the Spina Dorsi, between the Vena Azygos and Aorta, as high as the fifth Vertebra of the Back, or higher. From thence it passes behind the Aorta toward the Left Hand, and ascends behind the Left Subclavian Vein, where it terminates, in some Subjects, by a kind of Vesicula ; in others, by several Branches united together ; and opens into the Back-side of the Subclavian Vein, near the Outside of the internal Jugular.

This Canal is plentifully furnish'd with semilunar Valves, turn'd upward. Its Opening into the Subclavian Vein, in the human Body, is, in the place of Valves, cover'd by several Pelliculae, so disposed as to permit the Entrance of the Chyle into the Vein, and hinder the Blood from running into the Duct. It is sometimes double, one lying on each Side ; and sometimes it is accompanied by Appendices, call'd *Pampiniformes*. *Winslow, Sect. 9. Numb. 164.*

CHYMATION. The Name of an *Oxyporium* (a penetrating Medicine of quick Passage) in *Marcellus Empiricus*, *Cap. 20.*

CHYMIA. The same as *CHERMIA*, which see.

CHYMIATRIA, *χυμιατρία*, from *χυμία*, Chymistry, and *ιατρεία*, healing, is the Art of curing Diseases by chymical Medicines. *Blancard.*

CHYMICOPHANTA, *χυμικοφαντης*, from *χυμια*, a Chymist, and *φαίνω*, to appear, is a pretended Chymist. *Blancard.*

CHYMOLEA. See *KYMOLEA*.

CHYMOSUM, in *Paracelsus*, *Lib. 2. Paragraph. 2.* is a Term importing the same as *Chylus*.

CHYMUS, *χυμος*, Humour, Juice, and, in the common Signification of the Word, every Kind of Humour which is metallated by Concoction ; under which Notion it comprehends all the Humours fit or unfit for preserving and nourishing the Body, whether good or bad. It also sometimes imports the finest Part of the Chyle, when separated from the Faeces, and contain'd in the Lacteals and Thoracic Duct. In *Galen* it signifies the Gustatory Faculty or Quality in Plants and Animals.

CHYSIS, *χύσις*, from *χύνω*, to fuse, or pour out. Fusion.

CHYTLOH, *χύτλον*, according to *Erotian* on *Hippocrates*, is a plentiful Inunction with Oil and Water. *Foefius.*

CHYTRA, CHYTRINOS, CHYTRIDION, *χύτρα, χύτρων, χύτρινος*, in *Hippocrates*, signify a Pot of Earth.

CIBAGE, *Pino similis orientalis*, C. B. *Pini Forma Cibage*, J. B. A Tree growing in the Eastern Countries, and resembling a Pine-tree. I find no Virtues ascrib'd to it. *Raii Hist. Plant.*

CIBARIUM. The same as *Cibus*, or *ALIMENTUM*, which see.

*Giberius Panis*, in *Celsus*, is coarse household Bread.

CIBATIO, in Chymistry, is the same as *Corporatio*, which see. *Castellus.*

CIBOULS, or CHIBOULS, are nearly ally'd to the Scallions, being a Sort of Onion, which forms no Bulb at the Root, and which is cultivated in Kitchen-gardens.

CIBUR, CHYBUR. Sulphur. *Rulandus.*

CIBUS. See *ALIMENTUM*.

CIBUS ALBUS.

The *Cibus Albus*, or white Aliment, is a Species of Jelly, which, in *Fuller's Pharmacopæia*, is prepared in the following manner :

Take four Pints of Milk, the Breast of a boil'd Capon, and blanch'd sweet Almonds, two Ounces ; let them be beat, and a strong Expression made. Then let them boil over a gentle Fire, adding three Ounces of Rice-meal ; and, when they begin to coagulate, add eight Ounces of white Sugar, and ten Spoonfuls of the Water of red Roses : Mix all well together.

This is a highly beneficial Aliment in Consumptions, Gonorrhœas, and all other Cases, where the Intention is to correct and allay the Acrimony of the Humours.

The Spaniards also give the Name of *Cibus Albus* to a certain American Fruit.

CICADA, Offic. Schrod. 5. 340. Aldrov. de Insect. 307. *Jonf. de Insect. 22. Mouff. 127.* THE BAULM CRICKET.

This Insect is common in *Italy*, but unknown in *England*. It is furnish'd with Wings, and is somewhat like a Cricket, very noisy, and living only on Dew. In the Kingdom of *Naples* innumerable Multitudes of these Insects are continually sucking and feeding upon the Ornus, or Dwarf Ash, with the rounder Leaf, from whose Wounds, by Exudation, proceeds Manna. These Insects are used, when dry'd, in Colics ; and are recommended to be eaten, roasted, in Disorders of the Bladder. The Ashes of these, burnt, are said to wear away the Stone.

CICATRICULA is a little white Speck, or Vesicle, in the Coat of the Yolk of an Egg, wherein the first Changes appear toward the Formation of the Chick.

CICATRISANTIA. See *EPULOTICA*.

CICATRIX, *κίτρις*, is a Seam or Elevation of callous Flesh, rising on the Skin, and remaining there after the Healing of a Wound or Ulcer, and is commonly call'd a Scar.

CICCUS, *κίκκος*, in *Hesychius*, is a kind of small Grasshopper, contemptible enough to give Occasion for a Proverb. Also a Species of wild Goose in *Aldrovandus's Ornithology*, *Lib. 19. Cap. 10.*

CICER ALBUM, Offic. *Cicer sativum*, C. B. Pin. 347. Ger. 1047. Emac. 1222. *Raii Hist. 1. 917. Hist. Oxon. 2. 75. Elem. Bot. 309. Cicer sativum album*, Park. Theat. 1075. *Cicer arietinum*, J. B. 2. 292. *Cicer, Cicer arietinum*, Chab. 143. WHITE CHICHES.

The Cicer is a kind of Pulse, which grows to be about a Foot and a half, or two Foot high, with round hairy Stalks, on which are set, in an alternate Order, long hairy pinnated Leaves, consisting of seven or nine small oblong round pinnated Pinnæ, serrated about the Edges, with an odd one at the End ; but these Pinnæ do not always stand directly opposite. From the Bosom of the Leaves arises a single Flower, and sometimes two, which are small and white, less than Pea-blossoms, on long Foot-stalks, and are succeeded by short thick hairy Pods, each containing one or two Chiches, of a white Colour, bigger than Peas, but round like them, only somewhat sharp-pointed at one Side. They are sown in *Italy, France*, and other warm Countries, whence the Seed is brought to us. They flower in *June*, and the Peas are ripe in *July*.

The *Cicer nigrum* and *rubrum* differ in nothing from the white, but in the Colour of the Flower, which is purplish, and the Seed of a reddish Brown.

This is used to make up the Troches of Squills for the *The-riaca Andromachi*. *Miller's Bot. Off.*

They are cultivated in the Gardens of the Curious, and the Seeds are used in Physic. *Dale.*

White Chiches were much used in Food by the Antients, as they are at this Day by the *Italians*, who eat them both boil'd and crude, when green. They are esteem'd a stultent Aliment ; but are said to stimulate to Venery, to deterge, open, incise,



incide, digest, and to wear away the Stone; but are prejudicial when the Bladder or Kidneys are exulcerated. A Decoction of these is said to be good in a Jaundice; to destroy Worms; to provoke the Menes; to expel the Foetus. In Cataplasms they have the Reputation of curing Tetters, Ringworms, and Parotides; to discuss inflam'd Testicles, and consolidate malignant Ulcers.

**CICER RUBRUM & NIGRUM**, Offic. *Cicer arietinum nigrum vel rubrum*, Park. Theat. 1075. **RED AND BLACK CHICHES.**

They grow in Gardens, and flower in June. The Seeds are used, and the Broth made of them helps the yellow Jaundice; the Decoction expels Worms, provokes the Menes, brings away the Foetus, and generates Milk. Applied in Cataplasms, they cure the Pfora, Lichen, and Parotides, discuss Inflammations of the Testicles, and consolidate malignant Ulcers. They are diuretic and lenitive, for which Reason a Decoction of them is accommodated to Disorders of the Kidneys.

**CICERS SYLVESTRE**, Offic. Ger. 1047. Emac. 1222. Raii Hist. 1. 935. *Cicer sylvestre majus*, Park. Theat. 1076. *Cicer sylvestre foliis oblongis hispida majus*, C. B. Pin. 347. *Cicer sylvestre multiflorum*, J. B. 2. 294. *Cicer sylvestre multiflorum, radice crassa, & folliculis brevibus ventricosus hirsutis*, Chab. 143. *Astragalus; luteus; perennis; siliqua gemella; rotunda; vesicam referente*, Hist. Oxon. 2. 108. Boerh. Ind. A. 2. 54. Tourn. Inst. 416. Elem. Bot. 329. *Glauz*, Rivin. Irr. Tetr. Rupp. Flor. Jen. 217. Buxb. 140. *Glauz altera perennis, folliculis turgidis*, R. H. p. 935. **WILD CHICHES.**

They grow wild in the Fields and uncultivated Places of Italy, and other Countries, and flower in the Summer. The Seed is used, which is of a heating, drying, deterlive, and aperitive Quality, and agrees in Virtues with the other Cicers.

Boerhaave makes this a Species of **ASTRAGALUS**.

**CICERA TARTARI**. Small Pills, compos'd of Turpentine and Cream of Tartar. *Blancard*.

**CICERBITA**, according to *Blancard*, is a Species of *Sonchus*.

**CICERCULA**. See **LATHYRUS**.

**CICETHE**, *κικίθη*, in *Erotian* upon *Hippocrates*, is expounded by *κακίθη*, (*Cacoethe*) that is, of a bad Quality or Disposition; but *Foefius*, with good Reason, thinks there is a Fault in the Copy, and that instead of *κικίθη*, we should read *κακίθη*, or *κακίθησα*.

**CICHORIUM**.

The Characters are,

The Flowers stand on short Pedicles, proceeding from the Sides of the Stalks and Branches; and the Flower-cup contracts itself like a Capsula, containing angulated, wedglike, umbilicated Seeds.

Boerhaave takes notice of fourteen Species of this Plant, the eight first of which are annual, the rest perennial.

1. *Cichoreum; latifolium; five Endivia vulgaris*. Elem. Bot. 381. Tourn. Inst. 479. Boerh. Ind. A. 91. *Endivia, Scariola, Intybus*, Offic. *Endivia sativa*, Park. 774. *Intybus sativa*, Ger. 221. Emac. 282. Raii Hist. 1. 254. *Intybum*, Park. Parad. 495. *Intybus sativa latifolia five Endivia vulgaris*, C. B. P. 125. Hist. Oxon. 3. 53. *Intybum sativum latifolium*, J. B. 2. 1011. *Intybus vel Intybum*, Chab. 315. **ENDIVE.**

Garden Endive has pretty large, long, smooth, yellowish-green Leaves, broad and roundish at the End, and lacinated about the Edges, full of a bitterish Juice. The Stalk arises to be two or three Foot high, beset with smaller and narrower Leaves; the Flowers are blue, and like those of Succory, but smaller, growing on the Tops of the Stalks; and the Seed of it is pretty much like the Seed of Succory. The Root is long and slender, spreading but little. It grows in Gardens, flowering in June, the Root perishing after the Seed is ripe.

Endive is much used as a Salad-herb, especially after the Leaves have been ty'd together, and blanched in the Earth. It is cooling and moistening, opening Obstructions of the Liver and Spleen, and of Use against the Jaundice. It provokes Urine, and cools a hot Stomach. The Seed is one of the lesser cold Seeds. *Miller's Bot. Off.*

2. *Cichorium; latifolium; five Endivia vulgaris; floribus candidis*. T. 479. a.

3. *Cichorium; latifolium; five Endivia vulgaris*. T. 479. *Intybus sativa, angustifolia*. C. B. P. 125. M. H. 3. 53. *Intybum sativum, angustifolium*. J. B. 2. 1011. *Flor. caruleo*. a.

4. *Cichorium; angustifolium; five Endivia angustifolia; flore albo*. T. 479. a.

5. *Cichorium; crispum*. T. 479. *Intybus crispa*. C. B. P. 125. M. H. 3. 53. *Intybum sativum, crispum*. J. B. 2. 1011. *Latifolium*. a.

6. *Cichorium; crispum; angustifolium*. a. **NARROW-LEAV'D CURL'D ENDIVE.**

7. *Cichorium; spinosum; Creticum*. C. B. Prodr. 62. *Cichorium spinosum*. C. B. P. 126. J. B. 2. 1013. M. H. 3.

55. *Chondrilla genus, elegans, caerulea flore*. Clus. H. 145. 6. H.

8. *Cichorium; degener; ex semine Cretici*. T. 479. a.

9. *Cichoreum; sylvestre; five Officinarum*. C. B. 125. Hist. Oxon. 3. 55. Tourn. Inst. 479. Boerh. Ind. A. 91. Buxb.

72. *Cichoreum agreste sylvestre*, Offic. *Cichoreum sylvestre*, Raii Hist. 1. 255. Synop. 77. Ger. 222. Emac. 284. Park.

775. J. B. 2. 1007. Chab. 315. Dill. Cat. 159. **WILD SUCCORY.**

The main Difference between this and the *Garden Succory* is, its growing wild, and not rising so tall, but having the Stalks more stubbed and twisted. It grows in Lanes, and by Hedgesides, and flowers rather later than the *Garden Succory*.

The Virtues of the Wild are much the same with the Garden; some commend the distil'd Water of the Flowers to cool the Inflammations of the Eyes. *Miller's Bot. Off.*

Its Leaves and Roots are very bitter, full of Milk, and give a faint-red Colour to blue Paper: The Leaves stain it a little more; they are less bitter, and of a glutinous Taste. The Salt which is in the Succory does not seem to differ from the natural Salt in the Earth, but is joined with a considerable Quantity of Sulphur and terrestrial Parts.

Being analysed, it yields a great deal of Oil and Earth, some acid Liquors, a little urinous Spirit, and some concreted volatile Salt.

The Dandelion yields much the same Principles; but it affords no concreted volatile Salt: Nevertheless their Virtues are pretty much alike.

Succory-roots and Leaves are aperitive, diuretic, and cooling: They seem to cool only by removing the too long obstructed Humours in the Bowels. They are prescribed in Broths, Ptisans, Apozoms, and Clysters. The Juice procures Expectoration in Defluxions of the Breast. The Extract has the same Virtues, and purifies the Blood. The simple or compound Syrup is a good Aperitive, especially if two Drams or half an Ounce of Tincture of Steel be mixed with one Ounce of it. The Conserve of its Flowers is used on the same Occasions, in aperitive Boluses and Opiates; these Opiates are of great Service in the Cachexy, Dropsy, hypochondriac Disorders, intermitting Fevers, and troublesome Heats of the lower Belly. *Martyn's Tournefort*.

The famous *Erassistratus* had a great Opinion of this Plant.

10. *Cichorium; sylvestre; flore caeruleo; caule purpureo*.

11. *Cichorium; sylvestre; flore albo*. C. B. P. 126.

12. *Cichorium; sylvestre; flore roseo*. C. B. P. 126.

13. *Cichorium; sylvestre; minus; folio magis laciniato; flore caeruleo tenuiter dissecto; Jamaicense; caule & nervo folii viridi*.

14. *Cichorium; idem (13.); caule & nervo folii rubro*. Boerhaave's Index alter Plantarum, Vol. 1.

**CICHOREUM SATIVUM VERIS**, Offic. *Cichoreum*, J. B. 2. 1007. C. B. 125. Ger. 220. Emac. 280. Parad. 497. Hist. Oxon. 3. 55. Buxb. 73. Raii Hist. 1. 255. **GARDEN SUCCORY.**

This has a thick taper Root, brown on the Outside, and white within, full of bitter Milk. It grows deep in the Ground. The lower Leaves much resemble those of Dandelion in their Shape, and tooth-like Section; but they are much larger, and hairy. The Stalk arises to be a Yard or more in Height, striated, hairy, and angular; having the Leaves set on without Foot-stalks, almost encompassing the Stalk, being sharp-pointed at the End. Among these grow the Flowers, set on close to the Stalk, several together, of a lively blue Colour, composed of several Rows of flat Petals, indented at the Ends. The Seed is brown and longish, and grows not in Down, like the Seed of Dandelion. It is planted in Gardens, and flowers in June. The Root, Leaves, Flowers, and Seed, are used. The Seed is one of the four smaller cold Seeds.

The antient Botanic Writers generally affirm, that Succory is cold; but its Bitterness manifestly shews it to be hot. However, it is aperitive and diuretic, opening Obstructions of the Liver, and is good for the Jaundice. It provokes Urine, and cleanses the urinary Parts of slimy Humours, that may stop their Passage.

The only officinal Preparation, taking its Name from Succory, is the *Syrupus de Cichorio cum Rhabarbaro*. *Miller's Bot. Off.*

*Syrupus de Cichorio cum Rhabarbaro.*

**SYRUP of SUCCORY with RHUBARB.**

Take of whole Barley, of the Roots of Smallage, Fennel, and Asparagus, each two Ounces; of the Leaves of Succory, Dandelion, Endive, and Sow-thistle, each two Handfuls; of Lettuce, Liverwort, Fumitory, and the Tops of the Hop-tree, each one Handful; of Maidenhair, Wall-rue, Ceterach, Liquorice, Winter-cherries, and Dodder, each six Drams: Boil them in twelve Pints of Spring-water to eight Pints; and in the strained Liquor dissolve



dissolve and boil six Pounds of white Sugar, till it is of a Consistence for Syrup. S. A. Adding, towards the latter End, twelve Ounces of Rhubarb, and six Drams of Spikenard.

This continues the same as the College first received it into their Dispensatory. *Quincy's London Dispensatory.*

CICILIANA seu SICILIANA Planta. See ANDRO-  
SÆMUM.

CICINDELA, λαμπυρίς.

*Cicindela*, Offic. Schrod. 5. 340. Mouff. Insect. 108. Charlt. Exer. 48. Mer. Pin. 201. Jonf. de Insect. 80. Aldrov. de Insect. 492. *Noctiluca terrestris*, Col. Ecphr. 1. 38. *Scarabæus λαμπυρίς sordidè nigricans, corpore longo & angusto, seu Cicindela mas*, Raii Insect. 78. *Cicindela impennis seu scæmina*, Fjussl. 79. THE GLOW-WORM. Dale.

The whole Insect is used in Medicine, and recommended by some against the Stone. Cardan ascribes an anodyne Virtue to it.

Authors disagree much about Glow-worms, some affirming, that the flying Glow-worm differs from the reptile only in Sex, others asserting, that they differ in Species: Of the latter are *Julius Scaliger*, in his *Exercitationes*, and Dr. *Richard Waller*, in *Philos. Transf. Numb. 167.* who say they have found flying Glow-worms to be of both Sexes, by seeing them in Coition. We cannot, indeed, doubt the Veracity of these Authors; however, the Experiments lately made by Mr. *Benj. Allen*, M. B. confirm the Opinion of *Vintimiglia*, in *Fab. Columna*, and *Mouffet*, that the flying Glow-worms are Males, and the reptile Females; for that Gentleman, living at *Braintree*, often observed the flying Glow-worms in Coition with the reptile ones, but never could discover either flying or reptile in Coition with one another: Hence he justly concludes, as Dale also does, being convinc'd by his Experiments, that the flying Glow-worms are the Males, and the reptile ones the Females. Dale.

CICINUM Oleum. The Oil call'd *Cicinum* is thus prepared:

They take a convenient Quantity of ripe Seeds of the Palma Christi, (κεράωνες, *Ricinium*) and dry them, like Grapes, upon Hurdles, in the Sun, till the Husks break, and fall off: Then, collecting the naked Seeds, they put them in a Mortar, pound them well, and afterwards remove them into a tin'd Pot, with Water, and boil them. When all their Juice is exhausted, remove the Pot off the Fire, and with a Shell take up the Oil, which swims at Top, and reposit the same for Use.

In *Egypt*, where they make great Use of it, they prepare it after a different manner; for, after cleansing the Seeds, they put them into a Mill, and grind them carefully; then removing the Meal in Baskets, they commit it to the Press. The Seeds are in their Prime, when they are just fallen out of their Husks.

CICINUM is good for Achors, Psoa, and Inflammations of the Anus, for Obstructions and Distortions of the Uterus, to take off unseemly Scars, and to ease Pains in the Ears. It adds Efficacy to Plaisters; and, taken inwardly, purges watry Humours, and expels Worms. *Dioscorides, Lib. 1. Cap. 38.*

CICIS, κικίς, in some Places of *Hippocrates* and *Theophrastus*, is put for κικίς, (*Cecis*) a Gall. *Foesius.*

CICLA. See BETA ALBA.

CICONGIUS. A Measure, according to *Blancard*, containing twelve Sextaries, or Pints.

CICONIA, Offic. Schrod. 5. 315. Bellon. des Oyse, 202. Aldrov. Ornith. 3. 291. Mer. Pin. 181. Gefn. de Avib. 230. Jonf. de Avib. 100. Charlt. Exer. 108. *Ciconia alba*, Raii Ornith. 286. Fjussl. Synop. Avib. 97. Will. Ornith. 210. THE STORK.

It is seldom found in *England*. The Parts used in Medicine, besides the whole Bird, are the Gall, Fat, Dung, and Claw. The Stork is a remarkable Alexipharmic, being supposed a most excellent Remedy for all kinds of Poison, and especially the Pestilence; and also for Affections of the Nerves and Joints. The Gall is recommended for Diseases of the Eyes; the Fat is good to anoint gouty and trembling Joints; the Dung, drank in Water, is supposed to cure the Epilepsy, and other Diseases of the Head; and the Ventricle, or Claw, dry'd and pulveris'd, is accounted an extraordinary Secret in Cases where Poison is concern'd. Dale.

CICUTA. Hemlock.

The Characters are,

The Root is fibrous, large, and thick; the Leaves are very small, and much divided; the Petals are bifid, in the Shape of a Heart, and unequal; the Seed is short, round, and much striated.

*Boerhaave* takes notice of two Species of this Plant.

1. *Cicuta*; major, C. B. Pin. 160. Tourn. Inst. 306. Elem.

Bot. 255. Boerb. Ind. A. 56. Buxb. 73. Rupp. Flor. Jen. 229. Mer. Umb. 18.

CICUTA, Offic. Ger. 903. Emac. 1061. J. B. 3. 100. Dill. Cat. Giff. 116. Rivin. Irr. Pent. Raii Hist. 1. 451. Synop. 3. 215. Mer. Pin. 26. *Cicuta vulgaris*, Merc. Bot. 1. 29. Phyt. Brit. 27. *Cicuta major vulgaris*, Park. Theat. 933. Hist. Oxon. 3. 290. HEMLOCK. Dale.

*Hemlock* grows frequently to be a Yard and half or two Yards high, with smooth, round, hollow Stalks, spotted with black and purple Spots; it has many very large winged Leaves, which are divided into a great many smaller Fern-like Sections. On the Tops of the Branches grow large Umbels of white Flowers, of five small Leaves apiece, after which come round, deeply-furrow'd, whitish Seed. The Root is thick and woody. The whole Plant has a strong rank Smell. It grows in Fields, and by Hedge-sides, and among Rubbish, and flowers in Summer.

Whatever noxious and poisonous Qualities the *Hemlock* of the Antients was endued with, being that with which the *Athenians* used to put their Criminals to Death; 'tis certain, that the *Hemlock*, which grows in our Regions; (tho' it seems to agree well enough with the Description that *Dioscorides* gives of theirs) is of a less venomous and malignant Nature, several Persons having been known to have eaten some Quantity of the Root and Stalk.

*Hemlock* is used outwardly in Swellings and Hardness of the Liver and Spleen; for which the *Emplastrum de Cicuta cum Ammoniaco* is very useful, and is the only officinal Preparation we have from it. *Miller's Bot. Off.*

This Plant has an herby saltish Taste, smells of fetid Oil, and gives a very deep Tincture of Red to blue Paper; which makes us conjecture, that it contains a Salt resembling Sal Ammoniac, involved by a great deal of Oil and Earth. Pretty near the same Principles are found in the Apium. Its Leaves are very lenifying and resolvent; being boiled with Milk, they are apply'd with good Success to the Piles, and the Parts affected with the Gout. The Cataplasm of Hemlock-leaves, bruised with some Snails, and worked up with the four resolvent Meals, is excellent for the Inflammation of the Testicles, for the Gout, and Sciatica. The *Hemlock* Plaister is a good Resolver of scirrhus Tumors. This Plant is an Ingredient in the *Diabtanum* of M. *Blondel*, which is a very good Plaister to resolve Wens and scrophulous Tumors. *Martyn's Tournefort.*

*Emplastrum de Cicuta cum Ammoniaco.*

PLAISTER of HEMLOCK with AMMONIACUM.

Take of the Juice of Hemlock-leaves, four Ounces; of Vinegar of Squills, and Gum Ammoniacum, each eight Ounces: Dissolve the Gum in the Juice and Vinegar, and, after due Time standing together, strain them, and reduce to the Consistence of a Plaister. S. A. *Quincy's London Dispensatory.*

The *Cicuta Aquatica* is the PHELLANDRIUM, which see.

*Hemlock* taken internally, according to *Paulus Aegineta*, causes a Vertigo and Dimness of Sight, so that the Patient can scarcely see at all at any Distance. It also induces Hiccoughs, a sort of Madness, and a Refrigeration of the Extremities: Convulsions succeed, and Death, by an utter Interception of Respiration.

The Method of Cure is, immediately to bring it up by Vomit, and then to carry off what may have passed into the Intestines by a Cathartic Clyster. Then proceed to pure Wine, as the most effectual Remedy, which must be taken at Intervals, betwixt each Dose of which exhibit Cows or Asses Milk, or Wormwood, with Pepper and Wine; or else Castor, Rue, and Mint, with Wine, may be taken, and a Dram of Cardamoms, or Storax, or Pepper, with Nettle-seeds, in Wine, or the tender Leaves of Laurel; as also Sylphium, and its Juice, in Wine and Passum (γλευκῆ); but sweet Wine (γλευκός) alone is sufficient. *Paulus Aegineta, Lib. 5. Cap. 41.*

*Tragus* recommends a Draught of Vinegar, as an excellent Antidote against the Poison of Hemlock.

Notwithstanding the Accounts which Authors give of the poisonous Quality of Hemlock, Ray mentions twenty Grains of the Root in Powder as a most effectual Diaphoretic in malignant Fevers, and Quartans, exhibited before the Paroxysm; but I should not advise its Use.

CICUTARIA. Bastard-hemlock.

The Characters are,

The Root is large and thick: The Stalks are thick, hollow, and jointed: The Leaves are like the greater Hemlock, but are thicker: The Seeds are long, thick, gibbous, and shap'd somewhat like a Half-moon, and very much channel'd. *Miller's Dictionary, Vol. 1.*

*Cicuta*; minor; Petroselinum similis. C. B. Pin. 160. Hist. Oxon. 3. 290. Chom. 781.

CICUTA



**CICUTA MINOR**, Offic. Mor. Umb. 18. *Cicuta minor* *five fatua*, Park. Theat. 933. *Cicutaria tenuifolia*, Ger. 905. Emac. 1063. Raii Hist. 1. 451. Synop. 3. 215. Mer. Pin. 26. *Cicutaria Apii folio*, J. B. 3. 179. Chab. 405. *Cicutaria fatua*, Mer. Bot. 29. Phyt. Brit. 28. *Cynapium*, Rivin. Irr. P. Rupp. Flor. Jen. 223. Dill. Cat. Giff. 124. Buxb. 91. **THE LESSER HEMLOCK, OR FOOLS-PARSLEY.**

This Sort is of a smaller Growth than the preceding, and so like Parsley, that some unskilful Persons have gathered it, and used it as such, by which several have suffered in their Health, and some have been destroy'd thereby. *Miller's Dictionary.*

The Virtues agree with those of the preceding.

*Cicutaria*; latifolia; foetida. *C. B. Pin.* 161. *Tourn. Inst.* 322. *Elem. Bot.* 273. *Boerb. Ind. A.* 56.

**SESELI PELOPONNENSE**, Offic. *Seseli Peloponnesiacum recentiorum*, Park. Theat. 907. *Seseli Peloponense Matthioli five Cicutaria quorundam*, J. B. 3. 184. *Cicutaria maxima foetida*, Chab. 405. *Cicutaria latifolia foetidissima*, Raii Hist. 1. 451. Umb. 18. Hist. Oxon. 3. 291. *Cicuta latifolia foetidissima*, Ger. 903. Emac. 1062. **GREAT BROAD-LEAV'D HEMLOCK, OR BASTARD-HEMLOCK.**

It grows plentifully in the Country of the *Grifens*. The Root and Seed is in Use.

*Dale* says, that this Plant is possess'd of the same Virtues as the *Seseli Massiliense*, according to *Dioscorides*; but as Botanists agree, that this Plant is erroneously taken for the *Seseli Peloponense* of *Dioscorides*, we must not attribute the Virtues of the former to this.

Mr. *Jussieu* takes notice of another *Cicutaria*, which is the *Cicutaria foetidissima, foliis atrorubentibus*.

**CIDRA seu POMACEUM**. Cyder. See **POMUM** and **POMACEUM**.

**CIGNUS**. A liquid Measure, mention'd by *Rhodius, de Pond. & Mens.* from *Avicenna*, and containing, as he says, the Weight of two Drams. *Castellus*.

**CILIA**, *ταρσοί*, are the extreme Parts of the Palpebrae; they are semicircular and cartilaginous, with Hairs infix'd in them, which by some are call'd **CILIA**. *Castellus*. See **OCULUS**.

**CILIARE LIGAMENTUM, five PROCESSUS CILIARIS**, is a Range of black Fibres, circularly disposed, having their Rise in the inner Part of the Uvea, and terminating in the prominent Part of the Crystalline, which they surround.

**CILIARIS Musculus**. That Part of the *Musculus Orbicularis Palpebrarum* which lies nearest the *Cilia*, mistaken by *Riolanus*, who gave it this Name, for a distinct Muscle.

**CILLO**. A Name for one who is affected with a perpetual Trembling of the upper Eyelid; so call'd *à Cillendo*, i. e. *motitando*, from being in a continual Agitation. *Castellus*.

**CILO**, *περικεφαλή, φοζός*. One whose Forehead is prominent, and his Temples compress'd; that is, one who is beetle-brow'd. *Castellus*.

**CIMENTATIO**. The same as **CÆMENTATIO**, which see.

**CIMEX**, Offic. Schrod. 5. 341. Raii Hist. Insect. 7. Charlt. Exer. 52. Aldrov. de Insect. 534. Jons. de Insect. 89. *Cimex domesticus*, Mouff. de Insect. 269. *Cimex lectularius quibusdam*. *Cimices domestici impennes*, Mer. Pin. 202. **THE WALL-LOUSE, OR BUG.**

It is found in Beds, being a small Insect, of a rhomboidal Figure, and a dark-brown Colour, with six Feet, and a very tender Skin, so that it bursts with the least Compression, and emits a most offensive Smell. *Dale*.

Given to the Number of seven, as Food, with Beans, they help those who are afflicted with a quartan Ague, if they be eaten before the Accession of the Fit; swallowed alone without Beans, they are good against the Bite of the Asp; the Smell of them relieves under hysterical Suffocations; drank in Wine or Vinegar, they expel Leeches; and pulveris'd, and introduc'd into the urinary Passage, they cure a Difficulty of Urine. *Dioscorides, Lib. 2. Cap. 36.*

The Bites of Bugs are attended with so little Danger, that Physicians have not thought them of Importance enough to direct any Topic for their Cure. As they are very troublesome, I should apprehend, that anointing the Parts affected with Sallad-oil, or Spirit of Wine, would afford some Relief. *Actius, Tetrah. 4. Serm. 1. Cap. 44.* informs us, that a Decoction of the black Chamæleon, (see **CARTHAMUS**, if Beds are wash'd with it, prevents the Generation of Bugs.

**CIMOLIA ALBA**, Offic. Matth. 1392. *Terra Cimolia*, *Tourn. Voya. ad Angl.* 1. 113. *Argilla alba*, Charlt. Fossil. 1. *Cimolia Terra*, Calc. Mus. 127. *Creta Fullonica*, Worm. 3. *Creta Cimolia*, Aldrov. Mus. Metal. 1. 245. *Terra Candida Saponaria five Fullonica*, Kentm. 1. **TOBACCO-PIPE CLAY.** *Dale*.

*Dioscorides* says the *Terra Cimolia* is sometimes white, and sometimes of a purple Cast, which last has an innate Fatness, and feels cold to the Touch, and which is the best. Both of them, diluted in Vinegar, discuss Parotids, and other Tumors. Rub'd immediately upon recent Ambusions, they prevent Vol. II.

Pustules from arising on the affected Part. They repress Hardness of the Testicles, and Inflammations in all Parts of the Body, and are good against an Erysipelas. Upon the Whole, says he, they are of very extensive Use, provided they are genuine, and not spurious.

The *Cimolia Alba* was very famous among the Antients. It acquir'd its Name from *Cimolus*, an Island near *Crete*, now call'd *Sicandre*, where it was found in great Plenty.

*Tournefort* describes the *Cimolia Alba* as a white, heavy, insipid Chalk, abounding with small Grains of Sand, which he thinks the same as that got about *Paris*, except that the *Cimolia* is fattish and saponaceous, whence it is call'd *Terra Saponaria*. The Inhabitants, he says, make use of no other Soap for washing their Linen; whence the Virtues attributed to it by *Dioscorides* may be accounted for. I apprehend the *Cimolia Alba* is different from the common Tobacco-pipe Clay; but *Dale* informs us, that in *Cornwall* a sort of Clay is found, which he calls *Steatites*, and which is used as a Soap. In the Shops this Earth, with the Mark of a Seal upon it, is call'd *Terra Sigillata Alba*. It is also sometimes sold for the *Terra Samia*.

*Dale* farther informs us, that the *Cimolia Alba*, which he seems to think the same as Tobacco-pipe Clay, is drying and astringent, either apply'd externally, or taken internally; and farther, that it is an excellent Medicine in either continual or intermittent Fevers; and that it was the grand Secret of Sir *Theodore Mayerne*, in curing these Disorders.

*Cimolia purpurascens*, Offic. Matth. 1392. *Smeētis seu Terra Fullonica*, Mer. Pin. 218. *Smeētis seu Terra Saponaria Anglica*, Worm. 4. *Smeētis seu Terra Saponaria & Fullonica*, Charlt. 2. **FULLER'S-EARTH.** See **CIMOLIA ALBA**.

*Dale* says it is seldom or never used internally; but that, applied as a Topic, it is drying and astringent.

**CINA CINÆ**, or *China Chinæ*. A Name for the *Peruvian Bark*.

**CINABARIS**. See **CINNABARIS**.

**CINÆDUS**, *κίναδος*. The Name of a Bird, whose Gall *Galen (de Comp. Medic. S. L. Lib. 4. Cap. 8.)* recommends for rubbing the Eyelids, when the superfluous Hairs, in a Trichiasis, are pull'd off. It is a Sea Bird, very difficult to be taken.

**CINARA**. The Artichoke.

The Characters are,

The End of the Pedicle is expanded into a very squamous and compact Body, whose large Scales are afterwards expanded very wide, the inferior carnosous Parts of which are esculent; within these grows a carnosous, thick, esculent Disk, upon which grow small Calyxes, containing Ovaries, to the aculeated Apex of which grow monopetalous, tubulous Flowers; the external of which are large and barren; the internal monopetalous, tubulous, and furnish'd with Stamina and a Tube.

*Boerhaave* mentions six Species of the *Cinara*.

1. *Cinara*; *hortensis*; *foliis non aculeatis*. *C. B. Pin.* 383. *Buxb.* 74. *Tourn. Inst.* 442. *Cinara Scolymus*, Offic. *Cinara maxima alba*, Ger. 991. Emac. 1153. *Cinara, sativa alba*, Park. Parad. 519. *Carduus domesticus, capite majore cum spasmis dispersis viridibus*, Hist. Oxon. 3. 157. *Carduus five Scolymus maximus non spinosus*, Chab. 350. *Carduus five Scolymus sativus non spinosus*, J. B. 3. 48. Raii Hist. 1. 299. *Artichocus laevis*, Schw. 235. *Scolymus maximus non spinosus*, J. B. **ARTICHOKE.**

The *Artichoke* has several large long Leaves, of a hoary or whitish Colour, deeply cut into several Laciniae, sometimes prickly, and sometimes not. The Stalk is thick, solid, striated, bearing at the Top one large round Head, composed of a great Number of large, broad, tough Scales, ending in a broad Point, with a Prick or Thorn in the Middle: From among these, when they begin to ripen, spring a great Number of fistular Flowers, composing a large blue Thrum, which turn into Down, containing large corner'd Seed in a shelly Cover.

*Artichokes* are accounted a pleasant, wholesome, and very nourishing Food. The Roots are reckoned to be aperitive, cleansing, and diuretic; good for the Jaundice, and to provoke Urine. *Miller's Bot. Off.*

The *French* and *Germans* eat not only the Heads, but also the young Stalks boil'd, and season'd with Butter and Vinegar. The *Italians* seldom boil the Heads, but eat them raw, when young, with Salt, Oil, and Pepper.

*Artichokes* have the Reputation of promoting Venereal Inclinations to a very great Degree. The Stalks, preserv'd in Honey, are said to be an excellent Pectoral; but they should be first blanched like Celery.

The common Leaves, boil'd in White-wine Whey, are much commended in the Jaundice, as is the Juice of these Leaves.

2. *Cinara*; *spinosa*; *cujus Pediculi esitantur*. *C. B. Pin.* 383.

3. *Cinara*; *hortensis*; *non aculeata*; *capite subrubente*. *H. R. Par.* **GARDEN ARTICHOKE, WITHOUT PRICKLES, AND REDDISH HEADS.**

4. *Cinara hortensis*; *aculeata*. *C. B. P.* 383. *Tourn. Inst.* 442. *Elem. Bot.* 351. *Boerb. Ind. A.* 139. *Valck. Flor. Nor.* 4 H 110.



110. *Rupp. Flor. Jen.* 150. *Cinara*, Cod. Med. 25. *Cinara sylvestris*, Ger. 991. Emac. 1153. Park. Par. 519. *Carduus frue Scolymus sativus spinosus*, J. B. 3. 48. Raii Hist. 1. 299. *Carduus hortensis foliis spinosis*, Hist. Oxon. 3. 158. THE PRICKLY ARTICHOKE.

This is cultivated in Gardens, and is by some esteemed only a Variety of the first Species.

5. *Cinara Boetica*.

6. *Cinara*; *sylvestris*; *Boetica*. *Clus. Cur. Post. in Fol.* 35. *Carduus Tingitanus, flore magno cœruleo, foliis atrætylidis divi-surâ subincano, spinis durioribus horridis*, Plukn. Phyt. 81. 2. M. H. 3. 458. THE WILD ARTICHOKE OF BOETICA.

Besides these, there are some other Plants which go by the Name of *Cinara*; as the

*COSTUS NIGRA*, Offic. *Cinara sylvestris Cretica*, C. B. 384. Park. 972. Raii Hist. 1. 300. Tourn. Inst. 443. *Carduus Agriocinara Cretensium, ex quo Costus nigra Officinarum*, J. B. 3. 52. Hist. Oxon. 3. 158. *Agriocinara Cretensium*, Chab. 350. Append. 630. CANDY ARTICHOKE.

This grows principally in *Crete*, where the Heads are eaten raw by the Peasants, like the common Artichoke. The Roots, according to *Bellonius*, are sold for the true *Indian Costus* by the French Apothecaries.

*SCOLYMUS SYLVESTRIS*, Offic. *Scolymus Dioscoridis*, Park. Theat. 973. *Cinara sylvestris*, Ejusd. Parad. 519. Ger. 992. Emac. 1153. Raii Hist. 1. 300. *Cinara sylvestris latifolia*, 384. Tourn. Inst. 442. Cod. Med. 39. *Carduus Scolymus sylvestris*, J. B. 3. 51. *Carduus frue Scolymus sylvestris*; *Scolymus Dioscoridis*, Chab. 350. *Carduus frue Cinara sylvestris latifolia*, Hist. Oxon. 3. 158. WILD ARTICHOKE, OR CARDONET.

This grows in *Italy* and *France*. The Part in Use is the Flower, which is thought by the Vulgar to prevent Sterility, and preserve the Fœtus in the Womb to the just Period of Maturity. The Flowers coagulate Milk.

*CINAROIDES*. A Name for the *LIPIDOCARPODENDRON*, a Shrub which grows near the *Cape of Good Hope*.

*CINCLIS*, or *CINCLISMOS*, κίγκλις, and κίγκλισμός, from κίγκλιζω, to shake or wag, as a Sea Bird, call'd the Wag-tail, (κίγκλις) does his Tail. These, in *Hippocrates*, signify a small and frequently repeated Motion. Thus, in his Treatise *De Articulis*, he says, that there is but a small Agitation or Motion (κίγκλισμός) at the Articulation of the Breast.

*CINEFACTIO*. A Chymical Term, importing the Reduction of a Body to Ashes.

*CINERARIA*. A Plant, the same as the *Jacobæa Maritima*, C. B. P. 131.

*CINERARIUM*. The Ash-hole of a Chymical Furnace.

*CINERATIO*. The same as *CINEFACTIO*, or *INCINERATIO*.

*CINERITIUM*. A Cupel.

*CINERULA*. A Name for *Spodium*.

*CINETUS*. A Name for the Diaphragm.

*CINGULUM SANCTI JOHANNIS*, in Botany, is the *Artemisia*, Mugwort.

*CINGULUM SAPIENTIAE*.

This Species of Belt or Girdle was invented by *Rulandus*, and is no more than a Woollen Cloth sufficiently impregnated with Quicksilver kill'd with Hogs-lard. This is sewed up in a Linen Cloth, which is apply'd immediately to the Skin, about the Hypochondria. It is used in the Itch, the Phthiriasis, Ulcers, and in Cases where there is no absolute Necessity for exciting a Salivation; tho' it sometimes produces that Effect, but rarely, unless it is too long worn, or too richly impregnated with the Quicksilver. The Patient's Body must always be kept warm, and defended from the Cold of the external Air; otherwise the Belt, which is of itself highly safe, becomes very dangerous. *Ettmuller* informs us, that, during its Use, the Access of the external Cold endangers a Salivation, and that he knew a Patient, who, after a preposterous Use of this Belt, was seized with a violent petechial Fever. Hence we see the Reason why *Junker*, in his *Conspectus Chemicæ*, calls it the *Cingulum Stultitiæ*, or the Girdle of Folly. The same Author, in his *Conspectus Therapiæ generalis*, affirms, "That it excites violent Gripes, and other formidable Symptoms." *Hoffman*, therefore, justly asks, Whether the mercurial Girdle, apply'd for nine Hours, as it generally is, to an itchy Patient, with Juice of Apples, or other Liniments, is a safe Remedy? And he thinks the Question can only be answered in the negative, when it is not duly prepared, and when Universals have not been previously used. Thus a Man, whose whole Body was over-run with the Itch, and who was of a Caco-chymic and melancholico-pituitous Constitution, neglecting other Remedies, immediately used a Girdle, in which pure Mercury was mixed with Fat; upon which so violent a Ptyalism was excited, that he ran a Risque of being suffocated by the Swelling of the Parts: He was, however, freed from Danger by liberal Venesection, and the Injection of an acrid Clyster. *Bartholine* informs us, "That this Girdle proves mortal, when applied to Patients who

"are either too young, weaken'd by a Disease, or of a caco-chymic Habit of Body. Hence due Care must be taken not to apply it to weak Patients, and such as abound with impure Juices, at the time that the Methods to be previously used have been neglected." Hence, according to the same Author, a certain Countryman in *Denmark*, who, by the mercurial Girdle, happily cured several Patients, who, by the frequent Use of the Medicines prescribed by their Physicians, had their Bodies sufficiently purged, could not, at the same time, fail to destroy some others of weak and caco-chymic Habits. This Country Quack kill'd his Mercury with Oil of Juniper, made it up into a Mass, and secured it in a Piece of Leather made in the Form of a Girdle, which he tied about the Middle of the Body. This Girdle he recommended as effectual against all malignant Disorders, Cancers, and inveterate and obstinate Ulcers. Others make a mercurial Girdle in this manner: They mix the Mercury, kill'd by means of Saliva or Suet, with the White of an Egg, which they lay upon Cotton, and this Cotton they sew up in the Form of a Girdle. Another *Cingulum Sapientiæ*, invented by *Rulandus*, and by him said to be effectual in banishing Lice both from the Body, and from Clothes, is by *Hariman* ordered to be prepared in the following manner:

Take of the black Fæces of Mercury, prepared by shaking Mercury sufficiently with Spirit of Wine, a sufficient Quantity: Let this be mixed with the Pulps of roasted Apples, to the Consistence of an Ointment. Then take Shreds of Linen Cloth, cut in the Form of a Girdle; dip this Girdle pretty often in the liquid Extract of Saffron, and dry it. Upon two such Girdles let this Ointment be laid, by way of Plaister. Then, to the exterior Side, apply a Piece of thin Leather, and apply the Girdle immediately about the Loins.

According to *Simon Paulli*, in his *Quadripartitum Botanicum*, a more easy Method of banishing Lice is, to rub the Part affected with such Cloths as Tradesmen use in cleansing Silver, when they gild it; or with a Linen Cloth, soak'd in burnt Spirit of Wine, you may rub and wrap up the Part.

*CINIFICATUM*. Calcin'd; reduc'd to Ashes.

*CINIFLONES*. A Name of Reproach given to the vain boasting Chymists, who pretend to great Secrets in the Art.

*CINIS*. Ashes of any kind. *Cineres Clavellati*, Pot-ash. See *ALCALI*.

*CINNABARIS*, κιννάβαρι. Cinnabar. This Name seems to have been given, at one time or other, to almost all sorts of concreted Substances, whether vegetable or mineral. Thus the *Sanguis Draconis* was call'd Cinnabar, and even the Root of the *Rubia Tinctorum*, Madder, was call'd by this Appellation, according to *Neophytus*. Cerufs also, calcin'd to Redness, acquir'd the Name of Cinnabar. *Theophrastus* and *Dioscorides* give the following Account of the Cinnabar of the Antients.

There are two Kinds of Cinnabar, one native, the other factitious. The native Cinnabar is produced in *Spain*, and is very hard and stony; it is found also in *Colchis*, where, they say, it grows on inaccessible Rocks, from which they strike it off with Arrows. The factitious Cinnabar consists of a bright-grain'd red Sand, found in a certain Place a little above *Ephesus*, which they pound very carefully in Stone Mortars to a fine Dust, and afterwards wash it a little in Copper Vessels: What subsides to the Bottom is taken and pounded, and washed over again. This requires Art; for some obtain a good Quantity of Cinnabar, where others, of less Skill, can get little or nothing out of an equal Mass of Sand. What subsides is the Cinnabar; what swims, which is the greater Part, is the *Plysma* (the Washings). One *Callias*, an *Athenian*, is said to be the first Inventor of factitious Cinnabar; for he, imagining the Sand, because of its Glittering, to contain Gold, was very careful to collect it; but finding his Mistake, and yet admiring the Beauty of the Colour, his Curiosity at last led him to this Invention. Nor is this Discovery of any great Antiquity, being but ninety Years before *Praxibulus* was Archon, or chief Magistrate of *Athens* (the Year of *Rome*, according to *Pliny*, 249.). *Theophrastus de Lapidibus*.

The first-mention'd is our Native Cinnabar.

*Pliny*, who translates the foregoing Account, renders the κιννάβαρι of *Theophrastus* by *Minium*, Lib. 33. Cap. 7. He adds, that the *Greeks* call *Minium Miltos*, and some *Cinnabaris*; whence it comes to be mistaken for the *Indian Cinnabar*, which is the Name they have for the Blood of the Dragon, crushed by the Weight of the dying Elephant falling upon him, the Blood of both Animals being mixed together. This Cinnabar is very useful in Antidotes and Medicines; but the Physicians, instead thereof, use *Minium*, which is poisonous, because it is also call'd Cinnabar.

Some take Cinnabar to be what is call'd *Ammion*; but they are mistaken, for *Ammion* is prepared in *Spain* of a sort of Stone, mixed with Silver Sands. They know this Stone only by the very florid and flame-like Colour which it assumes in the Furnace. While it is in the Furnace, it emits a suffocating Vapour;



Vapour; for which Reason the Workmen of that Country cover their Face with a Bladder, that they may be able to see, and yet have their Respiration free from the noxious Exhalations. The Ammion, thus prepared, is used by Painters in costly Ornaments of Walls; but Cinnabar, which is our present Subject, is imported from *Africa*, and sold very dear, so as scarce to be purchased by the Painters in sufficient Quantities for the Colouring of their Lines. It is of a very deep and saturated Colour, whence some have taken it for Dragon's blood.

Cinnabar has the same Virtues as the Lapis Hæmatites, but is more effectual in ophthalmic Cases, being more astringent, and of greater Efficacy in stopping an Hæmorrhage. A Cerate, prepared with it, cures Ambustions, and Efflorescences [*ἄκαυστα*]. *Dioscorides*, Lib. 5. Cap. 109.

By the *Ammion*, *Dioscorides* probably means the first Sort of Cinnabar of *Theophrastus*, which both agree to be produced in *Spain*; and at this Day there is a celebrated Mine of Cinnabar at *Almaden*, a Town of *Estramadura*, of which Mr. *Jussieu* gives a long Account, in the *Memoirs of the Royal Academy of Sciences* for 1719.

There are at present three Sorts of Cinnabar used in Medicine. The first is the

CINNABARIS NATIVA, Offic. Schw. 374. *Minium purum*, seu *Cinnabaris Nativa*, Worm. 126. *Lapis Minium*, Aldrov. Mus. Metall. 637. *Cinnabaris*, Matth. 1355. *Minium*, Diosc. *Argenti vivi Minera*, *Cinnabar fossilis* *Dioscoridis*, Calc. Mus. 439. NATIVE CINNABAR.

The Native or Fossil Cinnabar of the Shops, call'd *Minium* by the antient *Greeks*, and *Anthrax* by *Vitruvius*, is a fossil, metallic, heavy Substance, not very hard, found sometimes pure, and sometimes mix'd with Stones. Of the pure Cinnabar there are several Kinds; one of a purple Colour, inclining to Red, but which, by grinding, turns to a very beautiful Red; another of a blackish or Liver Colour, resembling the Lapis Hæmatites; and a third of a yellowish Colour, which is commonly so rich in Quicksilver, that, when heated in the least Degree, the Metal drops spontaneously from it.

The other Kind of Native Cinnabar is found in a fossile Stone, form'd of Laminæ, of an Ash-colour. It has been likewise found in a white metalline Stone, and sometimes in form of a Gold or Silver Pyrites, such as was dug up some Years ago in several Places of *Normandy*.

Native Cinnabar is found in *Hungary*, *Bohemia*, *Italy*, *Spain*, and *France*, and every one knows of what Parts it is composed. Quicksilver is obtain'd from it, by distilling it with Quicklime, or Filings of Iron; and Sulphur may likewise be had, in a small Quantity, by boiling it in strong Lixivia, and then pouring distil'd Vinegar into the Decoction, the Quicksilver being first separated. The Native Cinnabar, of which Painters of old were extremely fond, is now seldom used by them, because the factitious Sort is cheaper, and answers all their Purposes equally as well. The Internal Use of it is recommended by some Physicians in the Epilepsy, Vertigo, Madness, and all spasmodic Affections. In these Cases they choose that of *Hungary* or *Carinthia*, which is of a sparkling-red Colour, and free from all heterogeneous Particles; and reject the dark or yellowish Kind, as being more impure. Sometimes, however, Native Cinnabar, by means of some vitriolic, or even arsenical Particles associated with it, happens to excite Nauseas, Vomitings, Anxieties, and Heart-burns, which I have myself more than once, says *Geoffroy*, been a Witness to, even after the Cinnabar had been purged by frequent Washings; and therefore I always prefer either factitious Cinnabar, or that of Antimony, to the Native. *Geoffroy*.

Every Pound of good Cinnabar yields fourteen Ounces of Quicksilver.

The second is the

CINNABARIS FACTITIA, Offic. Aldrov. Mus. Metall. 642. *Cinnabaris artificialis*, Schw. 375. COMMON VERMILION, OR FACTITIOUS CINNABAR.

1. Take a tall earthen Vessel, which widens upwards; put into it four Ounces of Flowers of Sulphur; then melt the Sulphur over a gentle Fire, the Make and Height of the Vessel thus preventing it from taking Flame. Then take Quicksilver heated, but so as not to fume, and pour a little thereof into the melted Sulphur, which will thus presently grow viscous: Stir it continually with a thick Tobacco-pipe; and continue pouring and stirring, till thrice the Quantity of Quicksilver, in proportion to the Sulphur, be thoroughly mix'd in therewith. At this time there commonly arises a great Hissing, with thick red Fumes, and the Matter takes Flame with a Noise: Put a Tile upon the Mouth of the Vessel, let all cool, and the Mass will be found black. (2.) Put this Mass into an *Hessian* Cucurbit; closely lute on a Head with a Mixture of Clay and Lime; or else invert another Body on the former: Set it in a Sand-furnace, so as to touch the Bottom of the Iron Pot; bury the Vessel in Sand, a little

below the Matter; raise the Fire gradually to the utmost: At first a little insipid Water will rise; then a few whitish Flowers, and at last a black Matter. When the Fire has been continued at the greatest Height for three Hours, let all cool: A compact Matter will be found sticking to the Sides of the Body, and appearing black on its outward Surface: Brush off this Blackness with a Hare's Foot, grind the Mass, and it will appear of a fine red Colour. It is call'd factitious Cinnabar. A little seculent Matter will remain at the Bottom of the Body.

#### R E M A R K S.

Cinnabar is a Mixture of Mercury and Sulphur, united by the Fire, in the Form of a simple Fossil, which is found natural in many Mines, and is like factitious, without much Difference. It has nearly the same Virtue, in the Body, as *Æthiops*. *Crato* call'd it the Magnet of the Epilepsy, but I never saw it produce any great Effects. If it be mix'd with Purgatives, then, like *Æthiops*, it is driven quicker thro' the Intestines, with the usual Success of *Æthiops*. It is mix'd with red Cosmetics, in the form of Pomatum: It is used in Fumigations against Venereal Ulcers in the Nose, Mouth, and Throat, with little, and often with bad Success. The Mercury may be revived very pure from the Cinnabar, by grinding it with twice its Weight of Iron-filings, and distilling it in a Retort, with the strongest Heat of a Sand-furnace, into Water. See *ÆTHIOPS*. *Boerhaave's Chymistry*.

*Lemery* says, that it is beneficial in Epilepsies, Asthmas, and the Pox; as also in order to promote a Transpiration of the Humours. The Dose is from two to twelve Grains, mix'd in some proper Conserve, and swallow'd in form of a Pill. It is also used externally in Ointments for the Itch; and Fumigations are made of it, in order to excite a Salivation.

The Method of raising a Salivation with Cinnabar is thus:

The Patient, being first duly prepared, is placed naked in a proper Chair, or Stove; and small Pieces of Cinnabar, to the Quantity of two or three Drams, being thrown upon live Charcoal, the Steam is received thro' the Pores of the Skin. The Patient grows soon very warm, and sweats more or less, in proportion to his Strength. This Operation is repeated every Day, or every other Day, till the Gums begin to swell and ulcerate, and the Spitting rises to a sufficient Quantity.

Venereal Ulcers, in the Mouth and Fauces, are also frequently fumed with factitious Cinnabar, the Smoak being received into the Mouth by means of a Funnel.

The third is the Cinnabar of Antimony.

The Cinnabar of Antimony, as well as Native and Factitious Cinnabar, is compounded of Sulphur and Mercury, being prepared of Antimony and corrosive sublimate Mercury; the Fire, after the Separation of the Butter of Antimony, being increased, that there may be a Sublimation of the fluid Mercury, separated from the corrosive sublimate Mercury, and of the Sulphur of Antimony, separated from its metalline Parts, into that highly florid Body, which constitutes the Cinnabar of Antimony, a Substance of a most beautiful Vermilion-colour, when powder'd. See *ANTIMONIUM*. This is the common Way of preparing Cinnabar of Antimony, which is by the same Process as that for making Butter of Antimony. But there are other Ways; as, for Example, let Sulphur, separated from Antimony, be sublimed with common Mercury. See *Tachenii Hippocrates Chymicus*. There are also other mercurial Preparations, which, being sublimed with Antimony, produce the Cinnabar of Antimony. See the *Ephemerides Germanicae*. Sometimes it happens, that, after the Antimony is put to the Sublimate for the Distillation of the Butter of Antimony, the Cinnabar is sublimed in a short time by a moderate Fire, while the Butter stays behind. See *Boyle's Tentamina*. But if the chymical Regulus of Antimony be chosen for the making of Butter of Antimony, no Cinnabar can be obtain'd, but a most pure Mercury, raised out of the corrosive Sublimate, which ascends by itself; because such a Regulus is destitute of Sulphur, to which it should join itself, in order to constitute this Cinnabar. Since it can be proved, that there is no Difference between Sulphur of Antimony and common Sulphur, with respect to their Nature and Virtues, we may justly conclude, that Cinnabar of Antimony, which is prepared with great Labour, and no small Cost, is no better for Use and Efficacy than common Cinnabar, which is easily and readily made of Quicksilver depurated, and common Native Sulphur, and, being equal to the other in Virtues, may therefore very well be substituted in its stead, as I am convinced by Observations, and the Experience of many Years; not to mention, that the common Cinnabar recommends itself by its Colour, which is more beautiful than that of the Cinnabar of Antimony. This Quotation is from the excellent *Frederic Hoffman*, in his *Observationes Physico-chymicae*. What he says, is not at all invalidated by Dr. *Chryse*.



*Cheyne, de Fibra*, where he makes Cinnabar of Antimony, very finely pulverised, the principal Medicine for cutting, attenuating, and rendering fluid, gross, viscid, and tenacious Humours; for it is certain, that Cinnabarine Substances, the more they are triturated, and the finer the Powder is, to which they are reduced, the more speedy will be their Effects in attenuating and cutting the coagulated Lymph, in resolving the thick, viscid, and grumous Blood, and in opening Obstructions, and other like Cases. On the contrary, if the Business of Trituration be neglected, and the Cinnabar only broken in a gross manner, it becomes not only the slower in Operation, but is frequently discharged, all of it, with the Fæces, which it tinges of a red Colour. Therefore, tho' a more accurate Comminution of this Cinnabar may conduce something to the facilitating and promoting of its Operation, it does not, however, convert it into a Remedy of more Efficacy than the common Cinnabar, treated after the same manner. It may not be ungrateful to the Reader, if I should here quote what *Johannes Jacobus Roek* says, concerning two Superstitions, as he calls them, of Physicians, with respect to Cinnabar of Antimony, in his *Treatise de Chymiatrica Superstitiosa*. The first is in the Explication of the specific Manner of its Operation; for Example, in the Epilepsy, which they imagine to proceed from its alkaline Nature; as, among others, I remember is asserted by *Morley* in his *Collect. Chymicis Leydensibus*. Here are three Things supposed, which may reasonably be doubted; first, that the proximate material Cause of an Epilepsy is an Acid; secondly, that the Cure is to be effected by Alkalies; thirdly, that Cinnabar of Antimony is an Alkali. The first of these Suppositions is overthrown, not only by the Account of the Cause of the Disease, drawn from its most genuine History, but also by the Method of Cure used in the Epilepsy, especially that of Children, of which we are now speaking; for the Symptoms, produced by the Cause, sufficiently inform us, that the Disorder draws its Origin from a viscid, tough, mucous, and tenacious Matter, lodged either in the Primæ Viæ, or in the other Parts destin'd for the Conveyance of the Serum: Hence this Species of Convulsion becomes necessary for eliminating and discharging such a peccant Mucus from the Body. This Assertion is also evinced by the accidental Causes of an Epilepsy; since we frequently observe this Disorder produced by repelling that Species of cutaneous Disorder call'd *Crusta Lactea*, or by an Induration of the Intestinal Fæces, which, in the very Nature of the Thing, require such a powerful Commotion of Nature for the Relief of the Patient. This Theory is in a manner subjected to our Senses, by Proofs à Posteriori, drawn from the Cure of an Epilepsy, which is accomplish'd by reducing the tenacious and viscid Humours to a due Degree of Fluidity, by Medicines appropriated to Catarrhs, by Absorbents, by Correctors, by Preparations of Myrrh and Amber; and, when they are corrected, by eliminating them, by means of purgative Preparations of Rhubarb, Mercurius Dulcis, and Orris-root; as also by perspirative Medicines of the milder Kind; and, lastly, by removing the Epileptic Motions by Preparations of Cinnabar, and other proper Remedies: Hence 'tis obvious, that an Epilepsy is produced rather by a mucous, viscid, and tenacious Substance, than by one of a saline and acid Nature. From what has been said, we may form a just Notion of the other Supposition, which is, that Epilepsies are cured by alkaline Substances; for, if an Epilepsy is produced by an Acid, it is of course to be removed by Alkalies. But the latter of these Assertions, as we have already seen, is contradictory to Experience; and the former must, of consequence, be groundless. As for the last Supposition, which is, that Cinnabar of Antimony is of an alkaline Nature, it is by no means founded upon Experience; since this Substance neither possesses nor exerts either the essential or accidental Virtues of an alkaline Salt: For tho', by Accident, upon the Affusion of a corrosive Acid, it produces the usual Noise of an Effervescence, yet it is not, for that Reason, to be call'd an Alkali; since the same Effect is produced by other metalline and mineral Substances, which are neither of an alkaline nor of an acid Nature. But this Motion, or apparent Effervescence, is produced by an Attenuation, a minute Division, and a Solution of Continuity among the solid Corpuseles, and the consequent Reception of the Fluid into their Pores. Another superstitious and useless Method of treating Cinnabar of Antimony, is the Transmutation of it into the Quintessence of Cinnabar, Panaceas, Specifics, and what is commonly call'd *Solar Cinnabar*, since these laborious Operations frustrate the Pains of the Undertaker, divest the Cinnabar of its genuine Qualities, and prove offensive to Men of a just and correct Taste in the chymical Way. Preparations of this Kind were long ago not only ridiculed, but treated with Contempt and Detestation by the celebrated *Ludovicus*: "For, says he, if any Virtue is produced by a long Calcination, or a Cohobation of the Spirits, as happens in the *Panacea Anwaldina*, which is prepared by a frequent Incorporation and Exliccation of the Spirit of Vitriol and Spirit of Wine with the Cinnabar of Antimony, this Virtue is by no means superior to that of other and more common Dia-

phorhetics." This is, in a particular manner, observable in the above-mention'd Panacea. As for the volatile Tinctures of Cinnabar, or its Quintessences, extracted with any aromatic Oil, alkaline Salt, or hot Spirit, or other anomalous Preparations of it, which are also call'd Wines of Life, and solar and spiritual Essences, they are nothing but Tinctures of an antimonial and sulphureous Nature. The uncommon Virtues ascrib'd to them for prolonging Life, by expelling from the Body every thing of a peccant Nature, instantaneously restoring the languid and impair'd Strength, and, in a manner, recalling fleeting Life, are no more than Words of course, and so many quack Encomiums. In like manner the *Balsamum Cinnalarinum*, accounted a Specific in Disorders of the Breast, and which, by previously dissolving the Union between the Cinnabar of Antimony and the Mercury, by means of some Alkali, is extracted from the same Cinnabar of Antimony, with the aromatic Oils of Anise, Mint, Lemon-peel, and Turpentine, is, in Reality, a Substance of the same Nature with the Balsam of Antimony, which, by a known Process, is extracted from what is commonly call'd the dry Tincture of Antimony, or that nitrous and sulphureous Salt obtain'd from the Scorix of the Regulus of Antimony, and is of singular Use both internal and external, since it is of an anodyne, detergent, and consolidating Nature. Besides, a diligent Inquirer into the Natures of Things will easily find, that the common Balsam of Sulphur is equal, if not preferable, to either of these now mention'd. For this Reason I think it advisable not to be so prodigal of the Cinnabar of Antimony, but to use it sparingly, since 'tis obtain'd by so much Labour and Expences, and since the Intention may be equally well answer'd by Things more easily procured. These are the Sentiments of *Joh. Jac. Roek*. Cinnabar of Antimony, when infused in Wine, imparts emetic and purgative Qualities to it, which Effect is not produced by common Cinnabar. From what has been said, we may reasonably conclude, that the Largeness of the Price is the only Circumstance, in which Cinnabar of Antimony differs from common Cinnabar duly prepared. *Rieger*.

The Dose of this Cinnabar is said to be from ten Grains to a Scruple. *Geoffroy* says fifteen Grains.

Cinnabar of Antimony has of late been introduced into Practice as a powerful Medicine, and capable of affording considerable Relief in Fevers, attended with Symptoms of an affected Brain; and the Use of it is attended with some Success. But I am afraid its Operation is too slow, to exert itself soon enough to cure so acute Disorders as those above-mention'd, especially as the Organs, employ'd in conveying it to the Blood, are, under these Circumstances, in a very weak Condition. More active Preparations, therefore, of Mercury and Antimony, promise greater Relief. See ANTIMONIUM.

CINNAMOMUM, Offic. Park. Theat. 1579. Comm. Plant. Usu. 77. *Cinnamomum Zeylanicum*, *Cassia Cinnamomea*, *Canella*, Mont. Exot. 8. *Cinamomum sive Canella Zeilanica*, C. B. Pin. 408. Raii Hist. 2. 1561. *Laurus Zeilanicus baccis calyculatis Hermannii*, Ejusd. *Cassia Cinnamomea*, Herm. Cat. Hort. Lugd. Bat. 129. Pluk. Almag. 88. *Laurus Ceylanica glandifera, folio trinervio, optimum & legitimum Cinnamomum ferens*, Mus. Zeylan. 12. *Canella*, Ger. 1349. Emac. 1532. *Canella sive Cinnamomum vulgare*, J. B. 1. 440. *Cinnamomi vel Canellæ arbor*, Chab. 33. *Canella Caudex, & Cassia vulgaris*, Pil. Mant. Arom. 165. *Arbor Canellifera Zeylanica, cortice acerrimo seu præstantissimo, qui Cinamomum Officinarium*, Breyn. Prod. 2. 17. *Kurudu*, Herm. Mus. Zeyl. 12. *Kurundu*, Ejusd. 37. THE TRUE CINNAMON-TREE.

Cinnamomum, or Cinnamum, among the *Latins*, are the same with the *κινναμον* and *κινάμωμον*, or *κιννάμωμον*, of the *Greeks*. This last Name is derived from *κινναμον* and *ἀρωμα*, or from the *Hebrew* Word *קין* or *קין* which signifies a Cane or Reed, and the *ἀρωμα* of the *Greeks*. In the Writings of the Antients, it is not positively determin'd what this Substance is, since most of what they have said concerning it is borrow'd from the Accounts of others. But in this they agree, that it is a certain precious and rare Production of the Vegetable Kingdom. According to *Pliny*, many fabulous Accounts were given of this Substance by the Antients; and *Herodotus* informs us, that it was obtain'd from the Nests of Birds, especially of the Phoenix, lodged in inaccessible Rocks and Trees; and that it was forced thence, either by the Weight of the Flesh the Birds convey to their Nests, or by Arrows, with proper Quantities of Lead affix'd to them. *Theophrastus* gives us an Account of another fabulous Opinion entertain'd in his Time, with respect to Cinnamon, in the following Words: "It is said to be produced in Valleys; and as these abound with Serpents, whose Bites prove mortal, the Inhabitants descend into them with their Hands and Feet properly defended, in order to gather the Cinnamon." *Pliny*, from *Herodotus*, informs us, that the *Cassia*, which, among the Antients, was our Cinnamon, was found about Marshes; and that such as gather'd it were exposed to the Attacks of wing'd Serpents, and a fierce Species of Bats with formidable Claws. *Selinus*, in *Cap. 30*. informs



us, that the *Ethiopians* gather Cinnamon, but that this Office is allotted to the Priests, who do not set about it till they have perform'd Sacrifice. Their Time of gathering it is confined between the Rising and Setting of the Sun; and when their Labour is at an End, the principal Man among them divides the Cinnamon into Heaps, with a kind of Spear appropriated to that Ceremony. Then a certain Portion of what they have gather'd is consecrated to the Sun; and if the Division is made in a just and equitable manner, this Portion takes Fire spontaneously. *Theophrastus* gives us the same Accounts, but looks upon them as palpably fabulous and absurd. The smallest Parts of the Twigs, about a Hand's-breadth in Length, are best; that which immediately succeeds them, next in Goodness, and that which is nearest the Roots worst, because there the smallest Quantity of Bark is found, in which the greatest Virtue, and most agreeable Taste, reside: For this Reason the Tops are preferable to the other Parts. The Wood itself, call'd *Xylocinnamomum*, is little esteem'd, and loathsome on account of its acrimonious Quality, resembling that of *Origanum*. Immediately after, *Solinus* subjoins, that some had spoken of two Kinds of Cinnamon, the one white, and the other of a blacker Colour; that in former Times the white was prefer'd, whereas now the black is esteem'd best. *Dioscorides* and *Galen* also distinguish the Cinnamon into various Kinds, taking their Distinctions from the various Degrees of Goodness, and the Places where they are produced. To give the several Characteristics by which *Dioscorides* and *Galen*, *Pliny* and *Theophrastus*, distinguished the good Cinnamon from that which was bad, would be not only tedious, but in a great measure useless, since 'tis of more Importance to know the distinguishing Properties by which the Moderns judge of the Value of this Commodity; and these shall be afterwards laid down.

According to *Dioscorides*, Cinnamon of every Kind is of a heating, emollient, and concocting Quality. It provokes Urine. When drank in some proper Liquor, or exhibited with Myrrh, it expels the Fœtus, and promotes an Eruption of the Menfes. It is proper against Poisons, and the Bites of venomous Animals. It removes Dimness of Sight, attenuates thick and viscid Humours. When mix'd up with Honey, and used by way of Ointment, it removes Freckles, and other cutaneous Defections of the Face. It is effectual against Coughs, Defluxions, Anasarca, Disorders of the Kidneys, and a difficult Discharge of the Urine. It is usually an Ingredient in precious Ointments, and is of very great, and almost universal Use. Some triturate it in Wine, dry it in a Shade, and lodge it under Ground, that it may remain good the longer. The same Author affirms, that Cassia, which is a Species of Cinnamon, provokes Urine, and is of a heating, drying, and gently astringent Nature. Hence he asserts, that it is proper for Maligmas, and Medicines intended to render the Sight clear. When mixed with Honey, and used by way of Ointment, it removes Freckles. It also provokes the Menfes; and, when drank in a proper Vehicle, proves beneficial against the Wounds made by Vipers. It is also good against all internal Inflammations and Disorders of the Kidneys. It is useful by way of Inseffion, or Fumigation, for dilating the Pudenda of Women. And double the Quantity of it, mixed with other Medicines, supplies the Place of Cinnamon when it cannot be had, since it produces the very same Effects. In a Word, it is highly useful for a great many Purposes. *Galen* affirms, that Cinnamon consists of very fine Parts, but that it is only hot in the third Degree; that Cassia is in some measure drying, and hot in the third Degree; that it consists of very fine Parts, is highly acrid to the Taste, and somewhat astringent. In consequence of these Qualities, he says, it incises and digests the recrementitious Juices of the Body, and corroborates the several Parts. *Strabo*, *Theophrastus*, *Dioscorides*, *Galen*, and *Pliny*, inform us, that Cinnamon is produc'd not only in *Arabia*, but also in the *East Indies*; for, since this latter Country is equally hot with *Arabia* and *Ethiopia*, it produces the same Aromatics, such as Cinnamon, Cassia, and others. From what has been said 'tis obvious, that the Antients were not well acquainted with the History of Cinnamon. Nor is this to be wondered at, since, according to *Pliny*, the Merchants who imported it into *Europe*, had a Voyage so long and hazardous, that they scarce return'd sooner than five Years, and many of them died during the Voyage, so that this Branch of Trade was principally carried on by Women. Hence it happen'd, that fabulous Accounts were not only rais'd, but also, because corrupted Commodities of different Appearances were imported, they gave the different Names of Cassia and Cinnamon to one and the same Substance. Some, because we can learn nothing certain from the Descriptions of the Antients, reckon Cinnamon among the Things that are lost. It is at present agreed on by all who have wrote concerning the Cinnamon-tree, that the Bark of the Branches is better than that of the Trunk. Hence the barbarous Nations made a Distinction between Cinnamum and Cinnamomum; by the former of which they meant the gross, coarse, and less aromatic Bark of the Cinnamon-tree, and by the latter that which is finer, and of a more agreeable Flavour. This Distinction is used by almost

all the *Arabian* Interpreters, in explaining the three Words *Selicha*, *Darfini*, and *Karfe*. By *Karfe* they understand the Cinnamomum, by *Darfini* the Cinnamum, and by *Selicha* the Cassia Lignea. But this Distinction is not agreeable to the Opinion of most Authors, who only think, that these are different Parts of the Bark of the same Tree. But the Accounts of the Canella, the Cinnamum, the Cinnamomum, and the Cassia Fistula, are so various, and involv'd in so much Obscurity, that they have a Tendency rather to distract and confound, than to satisfy and enlighten the Mind. For this Reason we shall pass them over without attempting a Reconciliation of them, and only observe, that what is at present in the Shops call'd *Cinnamomum*, *Canella Cinnamum*, or *Cassia Cinnamomea*, *odorata aromatica*, *Cassia Fistula*, is an aromatic Bark, of a reddish Colour, woody, friable, made up into Pipes of different Thickness and Length, of a sweetish, pungent, hot, and somewhat astringent Taste, of a fragrant Smell, appropriated to various Uses both in Cookery and Medicine, and gathered from the *Arbor Cinnamomifera Zeilanica*, which is also call'd *Cassia Cinnamomifera*, *Cassia Cinnamomea*, and *Canella Zeilanica*. The *Arbor Cinnamomifera* is produced in several other Parts of the *East Indies*; but all, with respect to the Worth and Efficacy of the Bark, are far inferior to that produced in *Zeilan*. And because in *Zeilan* there are ten Species of this Tree, omitting all the others, we shall only speak of that from which the best Cinnamon is gathered, which is yearly exported by the *Dutch East Indian Company*, and which by the Natives is call'd *Rasse Coronde*, which Words imply acrid, grateful, and sweet Cinnamon. The Tree bears large oval Leaves, of a thick firm Texture, with three remarkable Ribs running from Stalk to End. The Fruit it bears is small, longish, and round, growing in a short Calyx or Cup. From an Incision made in the Root of this Tree drops a Liquor which smells like Camphire. Besides, Camphire now-and-then issues from the Bark of this Root in the Form of oleous Drops, which insensibly coagulate into white Grains. Hence we may conclude, that the Cinnamon of the Antients was gathered from the same Species of Tree; for *Pliny*, in the nineteenth Chapter of his twelfth Book, informs us, that, "In the Temple erected in Honour of *Divus Augustus*, by his Spouse *Augusta*, he saw the Root of a Cinnamon-tree of great Weight, from which some Drops being yearly discharged, were indurated into Grains;" which, no doubt, resembled Camphire. This Species of Camphire, by the *Indians* call'd *Baros*, is also obtain'd by Distillation from the Bark of the Root, dry'd, bruis'd, and immers'd in Water. It comes off, with a Water, in the Form of an Oil; but, after the Water is become cold, it partly coagulates into white, small, pellucid Crystals, like small Icicles form'd at the Edges of Vessels by a moderate Frost. The Physicians of *Zeilan* use this distill'd camphorated Water with Success, exhibiting a Spoonful of it at proper Intervals, as a Sudorific in continu'd and malignant Fever. They also mix it with common Water, against Defluxions, and an epidemical Disease, by the Natives call'd *Pipa*. Externally it is apply'd with Linen Cloths for discussing edematous and watery Tumors. This Species of Camphire is by far the best for Medicinal Purposes; and in some Parts it is gathered and kept only for the Use of the Kings, who use it as a Cordial Medicine of singular and uncommon Efficacy. Not only the Camphire call'd *Baros*, but also the Oil of Camphire distill'd from the Roots, when taken internally, is possess'd of a cordial and restorative Quality. It in a particular manner corroborates the Stomach, dispels Flatulences, is singularly effectual against arthritic Pains, and is of a diuretic Quality. Ten or twelve Drops of it may be taken for a Dose, dropt on white Sugar, or into some proper Liquor. Externally it is apply'd in all Pains of the Joints, produced by Cold or Obstructions. For these Intentions it is to be sufficiently rub'd into the affected Parts with the warm Hand, by which means the Disorder is gradually and insensibly removed. After the Distillation is over, the reddish Liquor, which remains at the Bottom of the Vessel, when evaporated, yields an Extract, which is recommended in Fluxes. From half a Dram to a whole Dram of the Bark of the Root is also exhibited in Substance, in poisonous and malignant Disorders. The Inhabitants of *Zeilan* make their Fires, and build their Houses, of the Wood of this Tree. Its Leaves, in Distillation, yield an Oil of a bitterish Taste, resembling Oil of Cloves, to which a little of the Oil of Cinnamon has been added, and which is call'd *Oleum Alabatthri*. This aromatic Oil is highly celebrated as an instantaneous Remedy against Pains of the Head and Stomach, and various other Disorders. *Grimm*, in his *Thesaurus Medicus Insule Ceylonie*, informs us, that, when exhibited with some proper Water or Powder, it has miraculously remov'd Pains of the Abdomen arising from Cold; and that it is, besides, an excellent Corrector for the more violent and drastic Purgatives. The Water distill'd from the Leaves is said to possess the same Virtues, when exhibited in a large Dose. The Oil of the Leaves, made by boiling them with common Oil, is, on account of its heating, anodyne, and resolvent Quality, highly recommended for Chirurgical Intentions; in the Composition of Liniments, for Instance,



Cataplasms, and Clysters; as also in Colics, Gripes, Tympanies, and other windy and watery Tumors. The Leaves themselves, reduced to Powder, are, in *Zeilan*, also prescribed against flatulent Disorders, which require Medicines of an aromatic and heating Nature. They are also mixed with Purgatives, in order to correct their Force, and prevent Gripes. They are likewise used frequently, and in various Forms, for preparing Baths, Cataplasms, Ointments, and Clysters. From the Flowers is obtained, by Distillation, a fragrant Water, which, when exhibited by Spoonfuls, at proper Intervals, corroborates the Stomach, immediately alleviates colic Pains arising from Cold, improves the Colour of the Face, sweetens the Breath, and is esteemed proper for preserving several Species of Aliments, and rendering them more grateful and agreeable. A Conserve is also made of the Flowers, which is highly commended against Diseases arising from a cold Cause; and which may be given from one to two Drams. From the Kernels of the ripe Fruit is obtained by Expression, as also by Boiling, an Oil, which, in some measure, resembles Suet, is made up in Cakes like Soap, and has no Smell, except when warm'd, in which Case it smells somewhat like Cinnamon. This Oil is, by the *Dutch East Indian Company*, call'd *Cera Cinnamomi*, because the King of *Candia* orders his Candles and Torches to be made of it; and these Candles, on account of the Fragrance of their Smell, he reserves for his own Use, and that of the Court. He allows, however, the Inhabitants to express the pinguious fluid Juice from a Fruit not unlike that of the Cinnamon-tree, as the Oil is express'd from Olives, in order to burn in Lamps. Among the *Indians* this *Cera Cinnamomi* is used in Medicine, and exhibited internally to those whose Limbs are luxated, who have fallen from Precipices, or who have received Contusions or Blows, that the internal Parts, which are hurt and corrupted, may, by its medicinal and balsamic Virtue, be restored, and rendered sound. This Substance is also exhibited in Dysenteries, from one Dram to a Dram and an half. When used externally, it renders the Skin far more pure and soft, than any Species of Pomatum. It is also used in Ointments, and Plaisters of the resolvent, nervous, cephalic, and carminative Kind. In that Species of Palsy by the *Indians* call'd *Beriberi*, it is exhibited internally, and applied externally, because, by its gently anodyne and narcotic Quality, it reduces the Patients to a calm and easy State. When the Fruit, not as yet perfectly ripe, and grossly bruised, is distill'd with common Water, there is yielded with the Water an Oil exactly like that of Juniper in Taste, Smell, and Virtues. In the Bottom of the Still there remains a Substance, which is pinguious, green, and sometimes hard, like the Wax.

The Tree, which bears the Cinnamon, has a certain determin'd Number of Years within which it becomes fit to have its Bark taken off; but with this Difference, that some are ready two or three Years before others: For such as grow in Valleys, covered with a pure, small, whitish Sand, are generally ready for Decortication in five Years; whereas those produced in moist and dank Soils are not fit for this Purpose sooner than the seventh or eighth Year. These also arrive more slowly at Maturity, whose Roots are deprived of the Influence of the Sun by the Shades of taller adjacent Trees. Hence it also happens, that this Species of Bark is not so sweet, and agreeable to the Taste, as that produc'd in whitish sandy Soils, exposed to the Sun; since the former is bitterish, somewhat astringent, and tastes like Camphire; for, by the Influence of the Sun, the Camphire is rendered highly fine and volatile, by which means it enters the Juices of the Tree, and begins, in some measure, to ferment with them; and, rising upwards, betwixt the Wood and the tender interior Membrane of the Bark, it is so diffused among the Branches and Leaves, that the smallest Remains of the Camphire are not to be observed. Besides, this interior, soft, and glutinous Membrane between the Wood and the Bark imbibes the sweet and grateful Particles of this Juice, leaving those which are more gross and impure, and which are carry'd upwards, and convey'd into the Leaves, Flowers, or Fruit. But, as Accounts of this kind belong more properly to Natural History than Medicine, we shall proceed to inform the Reader, that, in the Shops, that Cinnamon is generally accounted best, which is lately gathered, of a yellowish Red externally, and internally of a somewhat darker Colour, which is smooth, easily broken, of a highly fragrant Scent, and pungent Taste. That which is small is preferable to the larger Kind; and the long Pipes are esteemed more valuable than the short. The best Kind is by some Authors call'd *Cinnamomum acutum*; and, according to the *Pharmacop. August. in Prolegom.* this Commodity is adulterated with the Bark of the Caper-bush, or Tamarisk, macerated in Cinnamon-water, and afterwards dry'd. But Falsifications of this kind are very rare, and easily detected. It is also generally adulterated by an Admixture of Cassia Lignea, which, for the most part, does not amount to a Fourth of the Price paid for Cinnamon. Some also adulterate, or rather spoil, the Cinnamon, by boiling or distilling it previously, by which means it is deprived of its best and most aromatic Qualities; but this Piece of Fraud is easily detected by

the Smell or Taste of the Commodity. When, indeed, the Pipes, divested of their fragrant Oil by Distillation, are laid for some time among good Cinnamon, they reassume their Virtues, which, at the same time, are lost by the good Cinnamon, in Proportion as they are imparted to that which is bad, according to *Boerhaave* in his *Chym. Vol. 2.* So that the bad cannot be distinguished from the good without examining every Pipe. But as this would be an immense and endless Labour to the Merchant, who buys large Quantities of it, he must, as *Panet* well advises, take care, that the Person with whom he deals be thoroughly honest. *Valentinus*, in his *Pandectæ Medico-legales*, T. 1. informs us, that the Powder of Cinnamon is sometimes adulterated by an Admixture of Bole; and, according to *Meier*, with the Barks of other Trees reduced to Powder. The Druggists, in order to keep the Cinnamon good, and preserve its Virtues entire, cover it over with Pepper; but *Ludovici* has observed, that, when preserved in this manner, it sometimes quite loses its natural Taste. Hence the better Method of preserving it is, perhaps, that of those, who, according to the Advice of *Cardan*, in his Treatise *De Subtilitate*, Lib. 13. preserve it among blanched Almonds. Cinnamon is much used for procuring a grateful and agreeable Taste to various kinds of Aliments, either by sprinkling its Powder upon them, or bruising and boiling it among them. As for its Medicinal Virtues, *Bauhine* expressly affirms, that whatever Virtues the Antients ascrib'd to their Cinnamomum and Cassia, justly belong to our Cinnamon, since it is of an aromatic, stimulating, and corroborating Quality. Hence it is classed among the stomachic and uterine Medicines, and affords singular Relief to Women afflicted with a Loss of Strength, a lax State of the Fibres, or a Suppression of the Menfes. In a Word, whatever can be said of the Use or Abuse of Aromatics, may be justly applied to Cinnamon; for, according to *Boerhaave*, in his *Chym. Vol. 1.* Cinnamon, the most excellent of all other Aromatics, is possessed of the same common Virtues with them, tho' in a higher Degree. Its Taste is exquisitely grateful, and its Smell so highly fragrant, that it diffuses itself not only over all the Island of *Zeilan*, but also, when the Winds blow from the Land, over a large Tract of the Ocean; so that, according to *Jurgen Andersen*, quoted by *Deshbadius*, the Sailors are sensible of the Smell of the Cinnamon at six or eight Miles Distance from the Shore. But 'tis observ'd, that Cinnamon, tho' an excellent Cordial, and highly beneficial in a Palpitation of the Heart, has, by being too frequently used, brought on the same Disorder in some Patients, in which Case Acids are the most effectual Means of Relief. Tho' 'tis highly proper in some Disorders incident to pregnant Women, yet, in these Cases, *Ettmuller* justly advises the cautious Use of it, because it powerfully irritates the Matrix to discharge the Menfes, and expel the Fœtus. Hence it is of so singular Service in difficult Labours, and in Cases where the Secundines and Lochia are to be expel'd, that *Lindanus* affirms, that no Emmenagogues, nor Medicines intended to expel the Fœtus, ought to be exhibited without an Admixture of a proper Quantity of Cinnamon. Physicians prescribe the Use of it in various Forms. According to *Degener*, in his *Historia Medica de Dysenteria*, *Raghi* ordered it to be chew'd in Substance during the whole Day, and the Saliva to be swallow'd. In Powder it is exhibited from half a Dram to a whole Dram. *Bauhine* informs us, "That the Powder call'd the *Pulvis Ducis* is used by many, which consists of Cinnamon and Sugar, and is of so grateful a Taste, that, with an Addition of Wine, it is used as a Sauce in the Entertainments of Grandees, whose Luxury is grown to such an exorbitant Height, that they use the most delicious Medicines as common Aliments." Of half an Ounce of the best Cinnamon, infused in a close-stopt Vessel, with two Pints of boiling Water, is prepared a highly grateful Drink, which recommends itself not only on account of its Colour, Smell, and Taste, but also on account of its analeptic, stomachic, and moderately astringent Quality in Fluxes; as also in a Weakness of the Heart and Stomach. *Deshbadius* affirms, that he has been told, by Persons of unexceptionable Veracity, that some Persons, by the constant Use of this Infusion of Cinnamon, as their common Drink, have preserved an excellent State of Health, and protracted Life to a great Age; and that others of weaker Stomachs, by using a Mixture of it and Wine at Meals, by that means got rid of their Disorder. Wine in which Cinnamon has been infused, when pass'd thro' a Filtre with Sugar, is what we call the *Vinum Hippocraticum*, *Hippocras*, or the Hippocratic Wine, which derives its so highly celebrated Virtues from the Cinnamon. In Decoctions it is generally ordered to be added last, that its aromatic and volatile Qualities may be preserved. If it is boiled for some time in any Liquor, it is divested of its volatile and aromatic Nature, and remains an astringent corroborating Substance; but, for this Purpose, it must be boil'd in an uncover'd Vessel. *Ludovici*, in *Ephem. Nat. Curios. Decad. 1. a. 9. o. 35.* affirms, that a Decoction of one Ounce of Cinnamon, in two Pints of good Wine, may, in a proper Dose, be twice a Day successfully exhibited in immoderate Discharges of the Menfes, even to Women of delicate and choleric Constitutions. The desired



desired Effect, produced by this Preparation, is, in my Opinion, to be accounted for from the corroborating Quality of the Cinnamon, by which the Tone of the Vessels being restor'd, the Blood was by that means enabled to make its way thro' Passages before obstructed; and thus an equable Circulation being restored, the immoderate Discharge of the Menfes was removed, as the Blood was derived elsewhere. Dr. Hales, in his *Statical Essays*, demonstrates the styptic Quality of the Decoction of Cinnamon, by the following Experiment: He injected a certain Quantity of it warm into the slit Intestines of a large Dog; upon which he observed the Vessels gradually contracted, and the Liquor received was retain'd for some time: Hence he infers, how effectual Cinnamon is, by its great Stypticity, in stopping too large Discharges into the Cavity of the Guts.

Before we enumerate the officinal Preparations of Cinnamon, we shall briefly give its chymical Analysis from *Boerhaave*, that we may be able to discover in what Part of it those efficacious Qualities, by which it distinguishes itself from other Aromatics, are lodged.

“ If, says this incomparable Author, you cautiously, and according to Art, distil a Pound of the best Cinnamon with boiling Water, and take care, that nothing of it be lost, it will yield you a milky Liquor of a fine Smell and Taste, and at the Bottom of it a small Quantity of a redish Oil, which is exceedingly fragrant, and possesses, in a very high Degree, the genuine Virtues of the Cinnamon; as, indeed, does this milky Liquor. If you, then, remove both these, and boil up the Cinnamon, which remains, with fresh Water, you will draw off a clear watry Liquor, of an acid Taste, and faint Smell; which is so far from containing any Signs of Cinnamon, that it is so like many others, that you will not be able to distinguish the one from the others. Then examine the Residuum of the Decoction, and you will find it of a brownish-red Colour, an acid austere Taste, without Smell, or any other sensible Quality, which gives the smallest Indication of Cinnamon. The Body of the Aromatic, indeed, remaining in the Decoction, one would be tempted to take for Cinnamon, since it resembles it so exactly in its Figure, and outward Appearance: But, upon farther Examination, we find, that this outward Resemblance is the Whole it retains of that noble Bark, since it has now lost all its primitive Virtues; and, indeed, there is very little Difference to be observed betwixt this and any other Bark or Wood, that has been previously treated in the same manner.

“ The genuine and peculiar Virtue, therefore, of the Cinnamon, is contain'd in the distil'd Water and the Oil, which subsides to the Bottom of it. If you let this Water remain at Rest for a considerable time, in a close Vessel, it will let fall an Oil, grow clearer, and become less aromatic. In the Oil, therefore, this uncommon Virtue is principally contain'd. But if you separate this Water from the subsiding Oil, whilst it yet remains richly impregnated with the Cinnamon, and put it into an open Bottle with a small Mouth, the whole Place will smell strong of Cinnamon, and in a short time the Water will become quite vapid, without any of the Properties of the Cinnamon; and yet, upon Examination, we shall find, that it has lost no more of its Weight than would have exhaled from common Water, in an equal time, in the same Vessel, and in the same Place. The uncommon Virtue, therefore, of this Water is lodged in a very small Quantity of it, which must, of course, be possess'd of very singular Qualities. Lastly, if this Oil is exposed to the Air in a wide-mouth'd Glass Vessel, a highly fragrant and grateful Smell of Cinnamon is diffused thro' the whole Place; but the Oil will, in the mean time, lose its peculiar Virtue; and, after a short time, there will remain an Oil, almost of the same Weight with the former, but perfectly exhausted and deprived of its original Qualities.” If the purest Oil of Cinnamon is diluted in Alcohol of Wine, and if the whole Alcohol is again drawn off by Distillation in a gentle Heat, it will, indeed, carry the Spirits along with it; but it leaves, in the Bottom of the Still, an Oil destitute of Spirits, and, at the same time, of a resinous Nature: Hence 'tis obvious, that the whole Virtues of the Cinnamon are lodged in the small Quantity of Oil it yields, and that they even reside in a small Quantity of that Oil. *Helmont* affirms, that, when the Oil is extracted from Cinnamon, it has an astringent Taste, like Oak-bark. *Casspar Neuman*, in his *Prælectiones Chymicæ*, tells us, that Cinnamon consists of oleous, saline, resinous, gummy, and mostly of earthy Parts: So that in one Pound of Cinnamon are contain'd almost three fourths of an indissoluble Earth, two Ounces of a resinous Substance, one Ounce and an half of a gummy Substance, and about two Scruples and an half of an essential Oil.

This Oil is yielded with the Water in Distillation, and subsides to the Bottom, in consequence of its being specifically heavier. It is of a yellowish or golden Colour, limpid, of a highly acrid, inflammatory, and corrosive Nature, whether

externally applied, or internally exhibited. It speedily cauterises any Part, to which it is applied, into a gangrenous Eschar. When preserved for several Years in close stop'd Phials, a great Part of it is said to be transform'd into a genuine Salt, which is capable of being dissolved in Water, and which is impregnated with the Virtues peculiar to Cinnamon. And Dr. *Stare*, as we are inform'd in the *Philosophical Transactions abridged*, T. 3. found, that, in twenty Years time, half of a certain Quantity of this Oil was become a Salt. We shall subjoin what *Ludewici* has observed, concerning the Nature of this Salt. He kept some of the Oil of Cinnamon for several Years, pouring a little common Water to it, lest, in Process of Time, it should become too thick and resinous. But in the Water he previously dissolved a small Quantity of common Salt. At certain Intervals he renew'd the Oil, and sometimes made an Addition to the Water, when it was too much exhausted. After he had neglected this for some time, he informs us, that a Salt was slowly concreted among the thicker Parts of the Urine, which, in its inferior Part, retain'd a cubical Form; but its superior Part was furnish'd with small Striae, like those of Nitre, but dispos'd in a more irregular manner. This Salt, taken out, and cleans'd with brown Paper and Cotton, under the Teeth, appear'd more compact than common Salt and Nitre, and almost resembled Sal Ammoniac; but its Taste was found less intense than that of other Salts of the same Kind. When laid upon live Coals, it did not burn or flame like Nitre, but was totally, and without any Noise, evaporated into a thick white Smoak, leaving only a black Spot, or the extinguish'd Coal, below it. The Smoak, however, did not so much resemble that of Cinnamon alone, as that of Cinnamon and Benjamin. But because this Oil, when negligently kept in the Air, loses its Spirits, and leaves not a Salt, but a dead Mass, it seems probable to *Boerhaave*, that in this Spirit, in consequence of its sulphureous Principle, there is lodged a certain Power of generating a Salt. A Pound of Cinnamon, tho' of the best Kind, according to *Sala* and *Hoffman*, scarce yields a Dram of Oil; and at most a Dram and an half, according to *Boerhaave* and *Lemery*. But, in *Holland*, the People who distil it, from each Pound, obtain more than an Ounce of the Oil, by the Assistance of Spirit of Wine, prepared in a particular Manner, which they keep as a Secret, as *Pomet* informs us he was told by a Person of Veracity: Hence it is, that the only Oil of this Kind, kept in the Shops of Apothecaries, is made by the *Dutch*, of whom they can buy it at a cheaper Rate than they could prepare it themselves. The same Author tells us, that he was credibly inform'd, that their Oil, commonly intended for Sale, was not genuine; but so adulterated with Spirit of Wine, well dephlegmated and tartarized, that not above one half of it is genuine Oil of Cinnamon: But he tells us, that this Piece of Fraud is easily detected, by putting the Point of a Knife into it, which, when applied to a lighted Candle, takes Flame immediately; whereas, when the Oil is genuine, it does not flame, but only smokes.

This Oil, by reason of its acrid caustic Nature, is by many highly celebrated as an excellent Medicine, in a deep seated Caries of the Bones. In which Case, it is either applied with a Tent, or dropt into the Part affected, or laid upon it, with Lint, covering all with a dry Dressing of the same. *Juncker*, in his *Conspectus Therapæ generalis*, uses the following Words: “ Distil'd Oil of Cinnamon is justly accounted a valuable and efficacious Medicine for stopping the Progress of a Mortification; only 'tis to be lamented, that its exorbitant Price hinders Surgeons from saving, or at least relieving, by its means, most of the miserable Patients afflicted in this manner.” *Tulpius*, in his *Observat. Medic. L. 1. C. 37*, informs us, that, in order to separate the carious Parts of Bones, he never saw nor read of any Medicine more effectual than Oil of Cinnamon, mix'd with Oil of Sublimate. As for the genuine medicinal Virtues of this Oil, when exhibited internally, *Boerhaave* informs us, that nothing in the *Materia Medica* is comparable to it, with respect to its restorative Quality, in Cases where Strength is impair'd, in Women during Gestation, hard Labour, or after Delivery, when, at the same time, there is no Inflammation, no Rupture, or Gaping of the Vessel; and that, if there is any Relief to be expected in Disorders of the Uterus, arising from a cold and mucous Phlegm, it is to be obtain'd by this Oil, properly used: Hence 'tis obvious, that, in Cases where 'tis not proper to increase the Heat of the Body, or the Motion of the Fluids, when the Heat and Motion are already too intense, we must abstain from the Use of this Oil. On the contrary, when that Species of Coldness is to be corrected, which arises from a flaccid State of the Vessels, or from a languid, mucous, or aqueous Condition of the Humours, it proves an excellent stimulating, corroborating, resolvent, and heating Medicine, provided the Vessels are entire. Hence 'tis obvious, that it may properly be added to Purgatives, not only with an Intention to render them more palatable, but also to prevent Flatulences and Gripes. Thus 'tis also added to Liniments, Ointments, and Balsams, not only for the sake of its fragrant Smell, but also on account of its resolvent, discutient,



and heating Qualities. Six Drops of it may be given in Substance, either in a poach'd Egg, sweet Wine, or Broth prepared with Flesh; but, most properly, dropt upon Sugar.

There are various Preparations of Cinnamon kept in the Shops, and directed in the several Dispensatories, to which every one may have recourse, either when his Inclination leads him, or Necessity compels him. Such as the *Aqua Cinnamomi simplex*, call'd also the *Aqua Cinnamomi sine vino*; and, in the *London Dispensatory*, the *Aqua Cinnamomi tenuis*. See AQUA. The *Aqua Cinnamomi cum vino*, in the *Pharmacop. Argentoratensis*. The *Aqua Cinnamomi Spirituosa*, in the *Disp. Brandenburgicum*. The *Aqua Cinnamomi Spirituosa*, in the *Pharmac. Parisiensis*. The *Aqua Cinnamomi fortis*, in the *London Dispensatory*, which, in that of *Edinburgh*, is call'd the *Aqua Cinnamomi cum vino*. See AQUA. The *Aqua Cinnamomi*, in the *Pharmacop. Bruxellensis*. The *Aqua Cinnamomi hordeata*, in the *Pharmacop. Parisiensis*, which, in the *Pharmac. Angletodanensis*, is only call'd *Aqua Cinnamomi*. The *Aqua Cinnamomi hughissata*, in the *Pharmacop. Argentorat.* The *Aqua Cinnamomi horraginata*, which, in the *Pharmacop. August.* is call'd the *Aqua Cinnamomi Cordialis*. The *Aqua Cinnamomi cum aquis Cordialibus*, in the *Dispens. Hafniense*. The *Aqua Cinnamomi Cardiacæ*, in the *Pharmacop. Batavana*. The *Aqua Cinnamomi Cydoniata*, in the *Pharmacop. Argentoratensis*. The *Aqua Cinnamomi contra Epilepsiam*, in the *Dispensat. Norimbergense*. The *Aqua Cinnamomi contra Pestem*, in the *Dispensat. Brandenburgense*. The *Elæosaccharum Cinnamomi Comp. sum.* call'd also *Aquæ Horizontale*, *Panacea Kornmanni*, and which, in the *Pharmac. Parisiensis*, is styl'd *Pulsis Driesdenfis sive auratus Germanicum*. The *Pulsis aureus Cellenfis*, in the *Dispensat. Ratibonense*. The *Balsamum Cinnamomi*. The *Essentia*, or the *Tinctura Cinnamomi*. The *Tinctura Cinnamomi Blancardi*. The *Elixir Cinnamomi*, in the *Dispensat. Norimbergense*. The *Syrupus de Cinnamomo*. The *Species Diacinnamomi*, or the *Diacinnamomum Mesuæ*. The *Electuarium de Cinnamomo Mesuæ*, in the *Antidotarium Bononiense*, which is also call'd the *Confectio Cinnamomi Mesuæ*. The *Confectio de Cinnamomo Regia*, in the *Dispensat. Norimbergense*. The *Diacinnamomum Regium*, in the *Dispensat. Ratibonense*. The *Confectio Cinnamomi fusa*. The *Cinnamomum Cottum*, in *Zwelfer Pharmac. Reg.* The *Cinnamomum Laxativum Mynsicht*. The *Magisterium Cinnamomi*, in *Schroed. Pharmac.* The *Sal Cinnamomi fixus*, in the *Dispensat. Brandenburgense*, and that of *Schroeder*. And the *Sal Volatile Oleosum Cinnamomi*, in the *Dispensat. Brandenburgense*.

Another Sort of Cinnamon is call'd,

CASSIA LIGNEA, Offic. Hein. 35. *Cassia Lignea Officinatum*, Park. Theat. 1580. *Cassia vulgaris Calibacha aucta*, Pl. Mant. A. 165. *Cassia Malabarica*, Herm. Cat. Hort. Lugd. Bat. 130. Comm. Flor. Mal. 73. *Cinnamomum sive Canella Malabarica*, & *Javanensis*, C. B. Pin. 409. THE CINNAMON-TREE OF MALABAR, Raii Hist. 2. 1560. *Canella Malabarica* & *Javanensis*, Jons. Dendr. 164. *Arbor Canellifera Malabarica*, cortice ignobiliore, cujus solum Malabaricum Officinatum, Breyn. Prod. 2. 18. *Cinnamomum Malabaticum*, *Canella Malabarica*, Mont. Exot. 8. *Carva*, Hort. Mab. 1. 107. Tab. 59. THE CASSIA LIGNEA-TREE.

This is the Bark of a Cinnamon-bearing Tree produced in *Malabar*, *Somatra*, *Java*, and the *Philippine Islands*. It is a Tree of the same Kind with that found in *Ceylon*; only its Bark is thicker, of a more woody Texture, and of a redder Colour. Whatever is said concerning that of *Ceylon*, may also be affirm'd of this, only in a lower Degree. The Bark of the *Cassia Lignea* is brought into *Europe* in small Pipes, like the *Ceylonian Cinnamon*; but is of a darker and more rufly Colour, of a more hard and compact Texture, of a more languid Smell, of a sweetish muciliginous and less hot Taste. It is also in smaller Pipes. Because this Species of Cinnamon is much cheaper than that of *Ceylon*, this latter is frequently adulterated with it. And the *Cassia Lignea* itself, according to the *Pharmac. August.* & *Prelegom.* is adulterated with the Barks of the *Caper-bush* and *Tamarisks*, macerated in the Water of *Ceylonian Cinnamon*, and afterwards dried. That is reckon'd best, which is small, of a purplish Colour, easily broken, fragrant, acid, of a sweetish and somewhat muciliginous Taste. Because it abounds with a volatile oleous Salt, theath'd up in a large Quantity of a muciliginous Substance, it therefore operates less powerfully on the human Body, and is proper in Cases where the Intention is moderately to heat, open, resolve, and strengthen. It also obtunds the Acrimony of the Humours, by the mild and balsamic Mucilage it contains. Some recommend an Infusion of it in Disorders of the Throat; and 'tis generally said to be highly beneficial in Diseases of the Uterus. Its Virtues are the same with those of the *Ceylonian Cinnamon*, only it is somewhat weaker, and less aromatic. It is an Ingredient in the *Thoriaca*, and some other Preparations, which

come under the Denomination of Antidotes. By Physicians it is rarely prescrib'd for other Purposes. From the *Cassia Lignea*, previously digested for a considerable time, is obtain'd, by Distillation, an Oil like that yielded by the *Ceylonian Cinnamon*, but less valuable. *Mynsicht*, of the distil'd Oil of the *Cassia Lignea*, prepares an *Elæosaccharum*, which he adds to the Rob of Quinces, boil'd, in a gentle Heat, to the Thickness of Honey, and reduced to the Consistence of an ordinary Syrup, by an Addition of the Tincture of the *Cassia Lignea*. This Medicine he highly recommends as a Cordial, especially to old Men, and such as are of a cold Constitution.

Another Sort of Cinnamon is the

CASSIA LIGNEA COMMUNIS, *Pharmacop. Paris.* *Cassia Lignea fusca aromatica*, C. B. Pin. 409. *Cassia Lignea fusca aromatica* & *glutinosi saporis*, J. B. 1. 451. *Cassia*, *Canella*, Chab. 33. *Arbor canellifera Indica*, cortice acerrimo, viscido seu mucilaginoso, qui *Cassia Lignea Officinatum*, Breyn. Prod. 2. 17. THE COMMON CASSIA LIGNEA.

It is a Bark, thicker than Cinnamon; but of a fainter Smell and Taste, of a redder Colour, harder Substance, and deprived of its outer Rind or Pellicle. It is brought from the *East Indies*, and common enough in the Shops.

The *Cinnamomum crassius Cortice* is the MALABATITRUM, which see.

*Cinnamomum Album* is the CANELLA ALBA, which see.

*Cinnamomum Magellanicum* is the CORTEX WINTERANUS, which see.

*Cinnamomum Spurium* is, according to *Rieger*, the *Cortex Caryophyllatus*.

CINNOGIOTTUS, CINNATUS. Terms coin'd by *Paracelsus*, *Chirurg. Lib. 5. Cap. 7.* by which he would express the total Destruction and Corruption of mineral Bodies.

CINNUS. The same as CYCEON, which see.

CINZILLA. A Name, in *Paracelsus*, for that Distemper which is by others call'd ZONA, which see.

CION, κίων, is defin'd, by *Aretæus*, a solid Body hanging from the Palate or Roof of the Mouth, between the Tonsils. It is also call'd, as he says, *Gargareon*; for *Staphyle* is the Name of a Disease. It is of a nervous Substance, but moist, because placed in a moist Situation. *Aret. de Caus. & Sign. acut. Merb. Lib. 1. Cap. 8.* Κίων is also a Disease, when the Part before describ'd swells to an extraordinary Size, and hangs down in an oblong Figure, representing a Pillar, which is the Signification of κίων, in Latin, *Columna* or *Columella*. See UVULA. From some Resemblance to this Disorder, *Hippocrates*, *Lib. πειρ γυναικ. εβτ.* and *Lib. 2. πειρ γυναικ. εβ.* gives the Name κίων to a carunculous Excrecence in the *Pulendum Malabre*.

CIONIA, κίονα, (or, as *Hermilanus barbarus* reads it, κίονα) in *Dioscorides*, are the middle Parts of the Whelks and Purple-fish, near the Centre of the Striae; which, being calcin'd, have a more caustic Quality than the other Parts, because of its presby Nature. The Flesh of Whelks and Purple-fish is grateful to the Palate, and friendly to the Stomach, but of a binding Quality. *Dioscorides*, *Lib. 2. C. 6.* See BUCCINUM.

CIONIS, κίωνος. The same as CION, which see.

CIPOREMA. A Species of Garlick growing in *Brasil*, without Leaves. *Raii Index*.

CIRCEA, κίρκισσα, from *Circe*, a famous Enchantress, who is supposed to have made great Use of this Herb in her Fascinations.

*Circea*, which some call *Dicrea*, has Leaves like Garden Nighthade, and abounds with Shoots. The Flowers are small, black, and numerous; and the Seed like Millet, sometimes inclosed in a Sort of small corniculated Capsules. The Roots are three or four Spans in Length, white, sweet-scented, and of a heating Quality. It grows mostly on rocky Grounds, and open Places exposed to the Sun and Wind.

The Root, to the Quantity of four Ounces \*, bruised, and macerated a Day and Night in three Pints of sweet Wine, [και γλευκεας] and drank for three Days together, purges the Womb. The Seed, taken in forbile Liquors, generates Plenty of Milk. *Dioscorides*, *Lib. 3. Cap. 134.*

This *Circea* is not the same as that Plant which now goes by that Name, according to *Parkinson*.

CIRCEA, of the Moderns, *Incubanters Nighthade*.

The Characters are;

The Root is fibrous, creeping, perennial; the Leaves alternate, entire, like those of the common Nighthade; the Cup of the Flower bifoliate, caducous, and growing in the Margin of the Ovary; the Flower dipetalous, caducous, furnish'd with two Stamina, and disposed in Spikes. The Extremity of the Pedicle passes into an Ovary of a round Figure, inclining to an Oval, furnished on its upper Part with a Placenta, and a long Tube, and passing into a Pyriform, or Pear-shaped, lapaceous, bicapsular, dry Fruit, containing two oblong Sides.

*Boerhaave* mentions two Species of this Plant.

\* For *μυα* I read, with *Cornarum*, *δωγγλα*, which agrees with *Pliny's Quadrant Radicis*; besides, four Pounds of the Root could hardly be macerated in three Pints of Wine.



1. *Circæa*; *Lutetiana*. *Lob. Ic.* 266. INCHANTERS NIGHTSHADE. *Ocymastrum verrucarium*, *J. B.* 2. 977.

2. *Circæa*; *minima*. *Col.* 2. 79. 80. THE SMALLEST INCHANTERS NIGHTSHADE. *Boerhaave's Index alter Plantarum*, Vol. 1.

*Gerrard* says, the first Species has the Virtues of *Garden Nightshade*.

CIRCIUS. The same as ARGESTES, which see.

CIRCOS, *κίρκος*, and, by a Metathesis or Transposition of Letters, *κίρκος*, signifies a Ring, a kind of Button, a Loop, and other Things of that Nature. *Rhodus, de Acia*, shews, from *Hippocrates's Methodicus*, and his Book *de Fracturis*, that *κίρκος* are Rings made of *Egyptian Leather*, which were sow'd on to some Part of the Apparatus necessary for the Distention of a luxated Leg.

CIRCUITUS. See PERIODUS.

CIRCULATIO, in Chymistry, is explain'd under the Articles CIRCULATORIUM, and CIRCULATUM, which see.

CIRCULATIO, in Anatomy, is the Circulation of any Fluid of the Body thro' the Vessels destin'd for its Conveyance. Thus there is a Circulation of the Chyle, for an Account of which see CHYLUS. A Circulation of the Blood, see SANGUIS. A Circulation of the Lymph, see LYMPHA. And a Circulation of the Spirits, see SPIRITUS. But Circulation is properly applied only to the Blood, because that moves circularly, or returns to the Heart again, the Origin of its Motion; which the others do not.

CIRCULATOR. A strolling Quack, or Mountebank. See AGYRTA.

CIRCULATORIUM, in *Latin*, corresponds to what in *English* we call a *Circulatory Glass*, which, among Chymists, signifies a particular Species of Glass Vessel, in which the contain'd Liquor, when put over the Fire, performs certain Gyration, and circulates by ascending and descending in such a manner, that the more volatile Part of the Liquor, raised by the Fire, not finding a Passage, may always fall back again. A *Pelican* constitutes such a Vessel, or a Glass whose Belly is of an oval Figure, for which Reason it is call'd *Ovum Philosophicum*, or the Philosophers Egg. But in the room of these may be substituted Phials, with long Necks, hermetically seal'd; or a Cucurbit, with a blind Alembic placed upon it; or a Cucurbit, or Glass Bottle, with a sufficiently long Neck, is so disposed, that, having first put in the Materials, another lesser Phial, whose Neck may enter it, is placed upon it. Then the Joinings are to be carefully luted, after the Vessels and Materials are become sufficiently warm, for carrying on the Process; for then the Air, being heated, and expanding itself, goes out of the Vessels; the Joinings of which being afterwards luted, the Fire may safely be raised, and continued at Pleasure. But, in this Process, it generally happens, that the Liquor, falling cold upon the warm Bottom of the Vessel, cracks it; for which Reason, we must proceed cautiously in raising the Fire. By this we understand, that the chymical Operation, commonly call'd *Circulation*, is no more than a certain Species of Digestion; and that to circulate a Liquor, is to place it in Circulation or Digestion, that its more volatile Parts may be continually raised, and fall back; and thus passing, as it were, in a Circle, may become finer, and more attenuated; for, according to *Sennertus*, Circulation is only used for those Liquors which are already depurated, and freed from their Fæces, or, at least, whose highest Degree of Subtilization is required. Thus Spirit of Wine, already rectified, is, by Circulation, said to be transform'd into what we call the Quintessence. According to *Barnerus*, Circulation is principally instituted for two Reasons. The first is, That the Spirits and Liquors to be join'd, being thus mutually driven backwards and forwards, may be the more effectually united. The second is, That any Substance to be disengaged from its Essence, or the Liquor in which it is contain'd, may be the sooner and more effectually separated from it. Since, then, Circulation is no more than a Species of Digestion, 'tis obvious, that, according to the Sentiments of *M. Hoffman*, the Subjects of this Operation may be either Liquids alone, or Solids mix'd with Liquids, either for the Purposes of Clarification, Depuration, Exaltation, or Maturation; and sometimes to obtain the Volatilization of fix'd Substances, or the Fixation of such as are volatile; but the Vessels must be very closely join'd, or hermetically seal'd, and a proper Space of Time allow'd for the several different Intentions of the Operator. That this Process may be supplied by repeated Distillations, is obvious, from the Article *CONOVATIO*. Hence the Reason is plain, why, in the Language of *Paracelsus*, to be subjected to Circulation, and to be distill'd into a Spirit, import one and the same thing.

CIRCULATUM.

According to *Boerhaave*, the *Circulatum* of *Paracelsus* was a Liquor, by infinite Labour, and a tedious Circulation, prepared from Sea-salt, in which bountiful Nature has lodged the highest Degree of Perfection. This romantic Chymist, by indefatigable Industry, from this Salt obtain'd a perpetual Oil, which he call'd *Circulatum Minus*, or *Circulatus Sal minor*, *Em pri*  
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*mum Salium*, *Oleum Salis*, *Liquor Salis*, and *Aqua Salis*. In this Process he used Spirit of Wine, but of what Kind is not at present known. He had also a *Circulatum Majus*, to which he likewise gave the Names of *Materia Mercurii Salis*, and *Ignis Vivens*, which was much more powerful and efficacious than the *Circulatum Minus*, and obtain'd with far greater Difficulty. From these two, intimately united, *Paracelsus* affirms, that he prepared the highly celebrated Solvent, in which Gold was so effectually transform'd, as to remain no longer Gold. *Barchusen*, in his *Pyrotophia*, gives us a distinct, tho' tedious, Preparation of both these *Circulatus*, extracted from the Writings of *Paracelsus* himself. The *Circulatum Minus* is prepared of Sea-salt, Water, the Juice of the Radish-root, and Alcohol of Wine. The *Circulatum Majus* was prepared of corrosive sublimate Mercury, and Sea-salt. Some affirm, that the *Circulatum Majus* of *Paracelsus* was no more than rectified Spirit of Wine; and that his *Circulatum Minus* was only Spirit of Vinegar. Others, as we find in the *Collectanea Chym. Leydens.* will have the *Spiritus Nitri dulcis* to be the *Circulatum Majus* of *Paracelsus*. We there also find *Maets* giving the following Directions for preparing the *Circulatum Minus* of *Paracelsus*.

Take any Quantity of the purest Flowers of Sal Ammoniac, twice sublimed from the common Salt. Upon these pour such a Quantity of the Alcohol of Wine, as shall rise three Inches above them. Let them stand in a moderately warm digestive Heat for three Days and Nights successively, or longer; for by this means the Spirit of Wine will intimately unite itself with the volatile Sal Ammoniac, and we shall obtain a Menstruum far more efficacious than the Alcohol of Wine. And when Spirit of Wine fails in extracting the Tinctures, for Instance, from the *Crocus Solis*, from the Glass of Antimony, and from other mineral Substances, this Menstruum will supply the Defect.

In *Blancard's Lexicon Renovatum*, the *Circulatum Minus* is said to be no more than Spirit of Wine. In a Word, some entertain one Opinion, and others another, concerning these whimsical and mysterious Preparations, with respect to which all are equally in the Dark. See ALCHAMÆST.

CIRCULUS, *κύκλος*, *κύκλον*, a Circle, besides its known Signification, is applied to Parts of the Body. Thus, in *Hippocrates, Lib. 2. de Morb.* *κύκλοι τῶν περὶ ὤφθαλμους* are the Balls of the Cheeks; and *κύκλα τῶν ὀφθαλμῶν* are the Orbs of the Eyes, or Cavities which surround the Eyes, *Lib. 7. Epid.* And, in the same Book, we read *ἔξ ἐρυθρῆς τῆς κυκλώσεως*, "the Urine round about its Margin was red, or was surrounded with a red Circle." *Galen* also, *de Usu Partium*, demonstrates seven Circles in the Eye. *Circulus* is also a Name which the Chymists give to a round Iron Instrument for cutting off a Neck of Glass, which is thus perform'd: They heat the *Circulus* red-hot, and apply it to the Glass, pressing it thereon till the Glass be thoroughly heated, when, by a few Drops of cold Water, or a cold Blast thereon, it flies asunder. It is also call'd *Abbreviatorium*. *Circus quadruplex*, the fourfold Circle, is a kind of Bandage, call'd also *Plinthius Laqueus*, *Gal. de Fasciis*. The *Circulus* is also reckon'd among chyrurgical Instruments, Figures of which, adapted to the Uterus, are represented in *Sculietus's Armamentarium Chirurgicum*, *Tab. 22. Fig. 6, 7, and Tab. 43. Fig. 5.*

CIRCUMCALUALIS, CIRCUMMOSSALIS, are Epithets in *Aetius, Terr. 2. Serm. 3. Cap. 1.* of the outermost Coat of the Eye, call'd also *Tunica Adnata*, and *Conjunctiva*. See OCLUS.

CIRCUMCISIO, *περιτομή*, *περιαιρέσις*.

*Albucasis* has described several Ways of Circumcision, but what he most recommends is the following: The upper Skin of the Penis, that is, the Præputium, is taken and stretch'd out, and held in that Posture, by a Ligature made in two Places. This done, the Operator, with a Pair of Scissors, immediately cuts off the Prepuce, making a Section between the two Ligatures. The same might be perform'd by a very sharp Razor, *Paulus, Lib. 6. Cap. 57.* directs Circumcision as necessary, when the Prepuce is affected with a Gangrene, and become black; in which Case it must be cut off with an orbicular Section, and the Blood stopp'd with red-hot salcated Irons. If the Glans also be turn'd black, it must be served in the same manner, and a small leaden Pipe introduced into the urinary Passage. I myself, in order to save the Patient's Life, when the Penis was cancerated, and corrupted below the Glans, have cut off the Part with a very sharp Razor, and, stopping the Blood with red-hot Irons, have subdued the Corruption, and cured the Man, *Fabricius ab Aquapendente, de Oper. Chirurg.*

Circumcision seems to be a very convenient Operation in warm Countries, for the sake of Cleanliness. For the Glandule Odoriferæ, lying under the Prepuce, discharge their Contents, which, lying under the Prepuce, corrupt, and become acrimonious, corroding the Glans, and inflaming both that and  
4 K



the Prepuce; and this, even in our cold Countries, where the Humours have not so great a Tendency to Putrefaction as in warmer Climates. This Case is often mistaken for a *Clap*.

**CIRCUMFORANEUS.** The same as *AGYRTA*, which see.

**CIRCUMLITIO**, *περίχαισις, περιχαισιν*, or more properly *περιχαισιν*. In *Marcellus Empiricus, Medicamentum Perichristation* imports, in general, any kind of Medicine apply'd to an affected Part, by way of Unction, or as a Litus; but, in a strict Sense, is appropriated to ophthalmic Medicines, with which the Eyelids are anointed. These latter Remedies, as *Scribonius Largus* says, N<sup>o</sup>. 29. are named *περιχαισιν* (*Perichrista*); and *Dioscorides, Lib. 1. Cap. 130.* calls them *ὀφθαλμικαὶ περιχαισεις*.

**CIRCUMOSSALIS.** See **CIRCUMCALUALIS**. The *Circumossalis Membrana* is the same as the *Periosteum*.

**CIRCUMSTANTIA**, *τὸ περιεστικόν*, in medicinal Matters, comprehends whatever is not essentially connected with the principal Indicant. Of this Kind, in what are commonly call'd *Res Naturales*, are the Condition of the Patient, and the Part affected, the Strength, Age, Sex, Custom, and Way of Life; in *Præternaturalibus*, or the Preternaturals, are the Times of Diseases, the Paroxysms, Number, and Symptoms; and, in the Non-naturals, the Air and Soil. These are the Things which regulate the Conduct of the Physician, and indicate how he ought to act. *Castellus*.

**CIRLUS.** A small Bird. The same as *LUTEA*, which see.

**CIRRHOS**, *κίρρος*, is a sort of Colour, particularly belonging to Wine, and importing the same as *Fulvus*, a pale Yellow, or fallow Colour, like that of a Lion. It is call'd also *Gilvus*, that is, the Colour of half-burnt Brick. It is a Colour between a White and a Yellow. *Dioscorides, Lib. 5. Cap. 8.* makes this Colour in Wine a Medium between White and Black; but, then, he takes *κίρρος* in a large Acceptation. *Castellus*.

**CIRRI.** See what they are under the Article **BOTANY**. *Cirri* are also the same as *CERÆA*, which see. And, in *Pliny*, they signify the Claws of the Polypus-fish.

**CIRSIIUM.**

The Characters are;

The Leaves are cover'd with short soft Prickles.

*Boerhaave* mentions nine Species of this Plant.

1. *Cirsium*; maximum, radice Asphodeli. *C. B. P. 377.*

**THE GREATEST ASPHODEL-ROOTED GENTLE THISTLE.**

2. *Cirsium*; Pannonicum; primum; pratense. *Clus. H. 148.*

3. *Cirsium*; latissimum. *C. B. P. 377.*

4. *Cirsium*; majus; singulari capitulo magno, vel incanum variè dissectum. *C. B. P. 377.*

5. *Cirsium*; singulari capitulo squamato; vel incanum alterum. *C. B. P. 377.*

6. *Cirsium*; singularibus capitulis parvis. *C. B. P. 277.*

7. *Cirsium*; acanthoides; montanum; flore flavescente. *T. 448.*

8. *Cirsium*; latifolium; flore flavescente in Capitulo folioso.

9. *Cirsium*; maculis argenteis notatum. *T. 448.* **THE WHITE SPOTTED GENTLE THISTLE.**

*Boerhaave's Index alter Plantarum, Vol. 1.*

The fourth and fifth Sort grow wild in England.

*Gerrard* says, that no medicinal Virtues are attributed to any Species of the *Cirsium*.

The *Cirsium* of *Dioscorides* is thus distinguish'd.

**CIRSIIUM**, *Offic.* *Cirsium foliis non hirsutis, floribus compactis*, *C. B. 377.* *Raii Hist. 1. 306.* *Hist. Oxon. 3. 149.* *Tourn. Inst. 447.* *Cirsium foliis non hirsutis*, *Ger. Emac. 1182.* *Cirsium montanum capitulis compactis*, *Park. 962.* *Cirsium Monspelianum, folio longo glabro Matthioli*, *Chab. 346.* *Carduus cirsium Monspeliacum, folio longo glabro Matthioli*, *J. B. 3. 44.* *Carduo-cirsium foliis non hirsutis floribus compactis*, *Pluk. Almag. 83.* **MELANCHOLY THISTLE.**

It grows in several Places near *Montpellier*; and flowers in June. *Dale*.

The Root eases the Pains of Varices, (*κίρρα*) if bound to the Part affected, as *Andreas* writes. *Dioscorides, Lib. 4. Cap. 119.*

The *Carduus Vincetoxicum repens*; *folio sonchi*, is call'd *Cirsium*, *arvense, sonchi folio, radice repente, flore purpureo*.

**CIRSOCELE**, from *κίρρα*, a Varix or Dilatation of a Vein, and *κύημα*, a Tumor.

Sometimes the Spermatic Veins, adjacent to and lying above the Testicles, as also those in the Processes of the Peritoneum, in the lower Part of the Scrotum, and sometimes above the Scrotum in the Groin, are so surprisingly swell'd, that they resemble a Species of Varix, the Intestine of some Bird, a Straw, and sometimes a Quill; except that they are sometimes, here-and-there, diversified with pretty large and unequal Knots,

and the Testicles hang lower than in their natural State. This Species of Disorder is, by Physicians, call'd *Ramix Varicosus*, *Varicocele*, and *Cirsocele*; tho', perhaps, it might be more properly call'd a varicose State of the Spermatic Vessels. Sometimes also the Veins of the Scrotum swell like *Varices*, as *Celsus* long ago observed; but, according to *Fabricius ab Aquapendente*, the Dilatation of these Veins is more properly accounted a Varix of the Scrotum than a Hernia, though these different Disorders are often unjustly taken for one and the same.

The principal Cause, both of the one and the other, seems to be either a Redundance, or a preternatural Inspissation and Viscidity of the Blood, which, whilst it remains in these Veins, may distend them too much, and excite the most troublesome Symptoms. Sometimes this Disorder may be produced by an external Violence, which, by contusing or weakening these Veins, must of course obstruct and hinder the Circulation of the Blood thro' them. Sometimes also young Men, especially those who abound with seminal Matter, or are of a salacious Turn, are subject to this Disorder, most generally within the Scrotum, as I have frequently observed; for the Spermatic Veins of such Persons, in consequence of the Redundance of Blood, and the impetuous Motion, with which it is carried to the Testicles, are sometimes distended to a surprising Bulk. But it rarely happens, that a Cirsocele, or any very troublesome Symptoms, arise from this Cause. Nor is every Dilatation of the Veins to be accounted a Cirsocele, as Quacks and Mountebanks often pretend it is; for, unless the Distention of these Veins is accompanied with troublesome Symptoms, or considerable Pains, there scarce appears any Reason, why, from a slight Distention, they should be accounted morbid, or employ a Physician, much less a Surgeon. It will not, however, be improper to give them the Advice afterwards laid down.

When these Veins are become so preternaturally large and turgid, as to excite intense and racking Pains, 'tis then necessary to look out for proper Means of Relief. But the Cure may be attempted in different manners; for when, in sound and vigorous Men, the Disorder arises from a Redundance of Blood, especially in the Spermatic Veins, Matrimony is the most speedy and efficacious Remedy, and therefore ought to be warmly recommended to them. But in Cases where this Method does not prove effectual, for I have seen some in a married State afflicted with this Disorder, as also in Cases where the *Cirsocele* is brought on by any external Violence or Contusion; Medicines are generally of no great Use; since by their means the preternaturally distended, debilitated, and lacerated Veins are, for the most part, slowly, and with great Difficulty, restored to their former Strength and Vigour. But, since this Disorder seems principally to arise from an inspissated Blood, we are, for this Reason, carefully to have recourse both to such Medicines as dilute the viscid Blood, and corroborate the weaken'd Veins. 'Tis also highly expedient the Patient should consult some skilful Physician, with respect to proper internal Medicines. And externally, besides Venesection, astringent and corroborating Fomentations are used with great Success.

But if, after a fruitless and unsuccessful Use of the most proper Medicines, the Knots and Pains of the distended Vessels, in the Coats of the Scrotum, are increased, the Antients recommended the Application either of the actual Caustery, or of a proper Ligature to these Veins. But as these Methods of Cure, to me, seem harsh and cruel, if these Varices are lodged in the Coats of the Scrotum, I think it will not, in this Case, be improper to make an Incision, with the Knife, in the distended Vein, as far as the Tumor reaches, taking from the Wound some Ounces of Blood. When this Step is judiciously made, the Wound is to be fill'd with Lint, and cover'd with a vulnerary Plaster, which must be secured with a proper Compress and Bandage. In the subsequent Dressings, the Conglutination of the Wound is to be promoted, by the Application of Balsams and Plaisters of a vulnerary Nature. For by this Method the Body is not only freed from the inspissated Blood, and the Pains produced by it; but also the lax and flaccid Part of the Vein is, by the Induction of a strong Cicatrix, so corroborated and fortified, that it is not for the future so subject to be distended by the Blood. If the Disorder has its Seat within the Scrotum, after making an Incision in this, and the Process of the Peritoneum, some proceed in the manner now directed. In both these Species, however, of the Disorder, the Patient is to be advised to drink a sufficient Quantity of some thin Liquor, to use frequent Exercise, and take such Medicines as attenuate the Blood, not omitting Venesection twice or thrice a Year. On the contrary, he is carefully to abstain from such Aliments as are viscid, and of difficult Digestion; as also from too sedentary a Life, since by these means the Mass of Blood is remarkably inspissated. This Advice ought also to be follow'd by those who perceive this Disorder beginning in themselves, either with a View to prevent its Increase, or remove it entirely. Some Surgeons, when this Disorder proves intolerably painful, apply a Ligature to the Spermatic Vessels in the Groin, and the Process of the Peritoneum, and extirpate the Testicle, together with the varicose Vessels. But if the Vessels are



are already indurated, as far as the Rings of the abdominal Muscles, 'tis adviseable to abstain from this Operation, since, in that Case, it is generally succeeded by the Death of the Patient. *Heist. Chirur.*

**CIRSOIDES**, κίρσοειδής, from κίρσος, and εἶδος, Resemblance, varicous, is an Epithet in *Ruffus Ephesus* for the upper Part of the Brain, the lower Part being call'd βᾶσις, (*Basis*) the Base; it is applied also by him to two of the four femoral Vessels, in his way of numbering them, the other two being ἀδενοειδής, glandulous.

**CIRSOS**, κίρσος. See **VARIX**.

**CISSAMPELOS**, κισάμπελος, an Epithet in *Galen* and *Ægineta* for a Species of **CONVOLVULUS** call'd *Helxine*.

**CISSAMPELO** *ramoso di Candia* *Pon. Bald. Ital.* is the **CONVOLVULUS**; *ramosus*; *incanus*, *Folii Pilosellæ*, *C. B. P.* *Boerhaave's Index alter, Vol. 1.*

**CISSANTHEMOS**. A Name in *Dioscorides* for one of his two Species of **Cyclamen**.

**CISSINUM**, κισσινον. The Name of a Plaister in *Ægineta*, *Lib. 7. Cap. 17.* for Wounds of the Nerves, and Stabs or Punctures, tho' never so inveterate.

**CISSYBIUM**, κισσύβιον. A Cup made of the Wood of Ivy, in Use among the *Greeks*, which *Langius, Lib. 1. Ep. 19.* recommends on two Accounts; first, because the Ivy, by its Coldness, resisted Drunkenness; and, secondly, because it discovered if any Water were fraudulently mix'd with the Wine; for, as *Cato, de R. R. Cap. 110.* asserts, if Wine mixed with Water be pour'd into an Ivy Vessel, the Wine will all pass thro' the Pores of the Wood, and leave the Water behind.

**CIST**, or **KIST**. A Vessel of Wine containing two Measures, or a Measure and half, according to the Difference of Places, being about four Pints. *Rulandus. Johnson.*

**CISTA**, κίστη, κίστις, according to *Pollux*, is a Cupboard to hold Meat, a Trunk for Clothes, or a Box for Medicines. The Word κίστις occurs in the spurious Additions to *Lib. 1. γυναικείων*, where a Collyrium for the Eyes is directed to be repositied ἐν χαλκῇν κίστις, "in a Copper Box." *Fœsius.*

**CISTERNA**, a Cistern, is a Term used by some Anatomists to signify particular Parts of the Body; as, for Instance, the fourth Ventricle of the *Cerebrum*, or rather of the *Cerebellum*, and the Concourse of the Lacteal Vessels in the Breasts of Women who give Suck. *Castellus.*

**CISTUS**, κίσθος.

The **Cistus**, which some call *Cisthorus*, or *Giffarus*, is a Shrub which grows in stony Places, is full of Branches and Leaves, but not tall. The Leaves are round, black, and hairy. The Leaves of the Male **Cistus** resemble those of the Pomegranate-tree, but those of the Female **Cistus** are white.

The Plant is of an astringent Quality, for which Reason the Flowers, bruised, and drank twice a Day in austere Wine, cure the Dysentery; made into a Cataplasm by themselves, they restrain Nomæ or spreading Ulcers; and, in a Cerate, they heal Ambustions and old Ulcers (*Galen* says, of the Mouth). *Dioscorides, Lib. 1. Cap. 126.*

The Characters of the **Cistus** are,

The Root is perennial, the Habit like a Tree. The Leaves are conjugated; the Calyx consists of three or five Leaves; the Flower is rosaceous, pentapetalous, expanded, and furnished with numerous Stamina. The Ovary rises from the Centre of the Calyx, with a rough, hemispherical, incumbent Apex; and becomes a roundish or acuminate, quinquedecapular, or multicapsular gaping Fruit, containing very numerous small Seeds. *Boerhaave, Index alter, Vol. 1.*

*Boerhaave* mentions seventeen Species of this Plant.

1. **Cistus**; *Ladanifera*; *Hispanica*; *salicis folio*; *flore albo*, *macula punicante insignito*. *T. 260.* **SPANISH GUM-BEARING CISTUS, OR ROCK-ROSE, WITH WILLOW-LEAVES, AND WHITE FLOWERS SPOTTED WITH PURPLE.**

2. **Cistus**; *Ladanifera*; *Hispanica*; *salicis folio*; *flore candido*. *T. 260.* **SPANISH GUM-BEARING CISTUS, OR ROCK-ROSE, WITH WILLOW-LEAVES, AND WHITE FLOWERS.**

3. **Cistus**; *Ledon*; *foliis laurinis*. *C. B. P. 476.* See **LADANUM**.

4. **Cistus**; *Ledon*; *foliis populi nigrae*; *major*. *C. B. P. 467.* **LARGE SWEET CISTUS, OR ROCK-ROSE WITH POPLAR-LEAVES.**

5. **Cistus**; *mas*; *folio oblongo*; *incano*. *C. B. Pin. 464. Jonsf. D. Tourn. Inst. 459. Elem. Bot. 227. Boerh. Ind. A. 275. Cistus Hypocistidem ferens, Offic. Cistus mas vulgaris, Park. Theat. 658. Cistus mas cum Hypocistide, Ger. 1093. Emac. 1275. Cistus mas IV. Monspelienfis folio oblongo, albido, J. B. 2. 3. Chab. 95. CISTUS, WITH THE HIPPOCISTUS. Dale.*

It grows on rocky Hills, and in Woods, and flowers in Summer. The *Hypocistis*, which adheres to the Tops of the Clods about the Root, is used in Medicine. See **HYPOCISTIS**.

6. **Cistus**; *mas*; *major*; *folio rotundiori*. *J. B. 3. 2.*

*Tourn. Inst. 259. Elem. Bot. 227. Boerh. Ind. A. 275. Cistus mas, Offic. Park. Parad. 421. Ger. 1093. Emac. 1275. Cistus, Chab. 95. Cistus mas folio rotundo, hirsutissimo, C. B. Pin. 464. Raii Hist. 2. 1007. Cistus mas folio subrotundo, Park. Theat. 658. Cistus rotundifolius flore roseo, Rupp. Flor. Jen. 101. MALE HOLLY-ROSE, OR CISTUS. Dale.*

It grows in *Italy* and *Spain* spontaneously, but with us it is cultivated in Gardens, and flowers in Summer. The Leaves and Flowers are used in Medicine, and their Virtues are already specify'd from *Dioscorides*, in the Beginning of this Article.

7. **Cistus**; *mas*; *foliis undulatis, & crispis*. *T. 259.* **MALE CISTUS, OR ROCK-ROSE, WITH WAV'D AND CURL'D LEAVES.**

8. **Cistus**; *mas*; *folio brevior*. *C. B. P. 464.* **SHORT-LEAV'D MALE CISTUS, OR ROCK-ROSE.**

9. **Cistus**; *Lusitanicus*; *folio amplissimo, incano*. *T. 259. H.*

10. **Cistus**; *mas*; *II. folio longiori*. *J. B. 2. 2.*

11. **Cistus**; *fœmina*; *folio Salviæ*, *C. B. Pin. 464. Raii Hist. 2. 1008. Tourn. Inst. 259. Elem. Bot. 227. Boerh. Ind. A. 275. Cistus fœmina, Offic. Ger. 1094. Emac. 1276. Cistus, Park. Parad. 422. Cistus fœmina vulgaris, Theat. 660. Cistus folio Salviæ, Rupp. Flor. Jen. 101. Cistus fœmina Monspeliana, flore albo, J. B. 2. 4. Buxb. 96. FEMALE HOLY-ROSE.*

The Leaves and Flowers are in Use, which agree in Virtues with those of the *Cistus Mas*.

12. **Cistus**; *Ladanifera*; *Monspelienfium*. *C. B. P. 467.* **THE GUM-BEARING CISTUS, OR ROCK-ROSE OF MONTPELIER.**

13. **Cistus**; *Ledon*; *foliis angustis*. *C. B. P. 467. H.*

14. **Cistus**; *folio Halimi*; *I. f. Clus. H. 71. Cistus, fœmina, portulacæ marinæ folio latiore, obtuso. C. B. P. 465.*

15. **Cistus**; *folio Halimi*; *II. f. Clus. H. 71. Cistus, folio Halimi longiori incano. J. B. 2. 5.*

16. **Cistus**; *fœmina*; *folio Salviæ*; *flore Ochrae colore*. *C. B. P. 465.*

17. **Cistus**; *foliis rorismarini, sed non incanis*. *C. B. P. 467. Boerhaave's Index alter, Vol. 1.*

Besides the foregoing Species of the **CISTUS**, *Dale* gives us the following.

**LEDUM ROSMARINI FOLIO**. *Buxb. 182. Rupp. Flor. Jen. 101. Cistus, Ledon foliis Rosmarini ferrugineis, C. B. Pin. 467. Raii Hist. 2. 1006. Cistus, Ledum Silesiacum, Ger. 1106. Emac. 1288. Rosmarinus sylvestris quorundam, J. B. 2. 23. Chab. 103. Rosmarinum sylvestre Bohemicum Matthioli, five Ledum Silesiacum Clusii, Park. Theat. 75. BOHEMIAN ROSEMARY.*

It grows in Woods, and flowers in July. The Herb is in Use, which is of an inebriating Quality; for which Reason, in many Places of *Saxony*, they boil it in their Beer, to make the Peasants drunk the sooner; whose Heads, when they have drank freely of this good Liquor, are affected with it for some Days afterwards: They lay it also among Clothes to expel Moths. *Dale.*

**CITHARUS**, κίθαρος, according to *Hesychius*, signifies the Breast, the Side, and a Species of Fish. In the first Sense it often occurs in *Hippocrates*, as *Galen*, in his *Exegesis*, expounds the Word, which, as we are inform'd by *Erotian*, was a Term in Use among the *Dorians*.

**CITRA** *Indis Lignum*, *J. B.*

A Sort of reddish, sweet-scented Wood, of an aromatic Taste, growing in the *East Indies*. It is a Question whether this Wood be of the *Citrus Arbor* of the Antients, of which they made very costly Tables. *Raii Hist. Plant.*

**CITRAGO**. A Name for the *MOLDAVICA*; *Betonica* *flore albo*; which see. *Boerhaave, Index alter, Vol. 1.*

**CITREUM**. The Citron-tree.

The Characters are,

It hath broad stiff Leaves, like those of the Laurel, but without any Appendix (as hath the Orange): The Flowers consist of many Leaves, which expand in form of a Rose: The Cup of the Flower is slender and fleshy, and is divided into five Segments at the Top: The Pistil of the Flower becomes an oblong, thick, fleshy Fruit, which is divided into many Cells, is very full of Juice, and contains several hard Seeds.

Of this there are two Species.

1. **Citreum**; *vulgar*. *Tourn. Inst. 620. Elem. Bot. 403. Boerh. Ind. A. 2. 240. Malus Citria, Offic. Citrum, Malus Citria, Commel. Plant. Usual. 87. Malum Citrum, Aldr. Dendr. 525. Citreum, Malus Citria, Malus Medica, Mont. Ind. 40. Citreum Malum, Ind. Med. 37. Malum Citreum vulgare, Ferr. Hisp. 61. Malus Citria vulgaris, Jonsf. Dendr. 10. Malus Citria five Medica, Raii Hist. 2. 1654. Malus Medica five Citria, Park. Theat. 1506. Malus Citria, J. B. 1. 94. Malus Medica, Ger. 1278. Emac. 1462. C. B. Pin. 435. Chab. 4. THE CITRON-TREE.*

2. **Citreum**; *Medulla dulci*.

The first of these is principally used in Medicine. It does not grow to be a Tree of any great Bigness, being frequently planted



planted for Fences and Hedges in the *West Indies*, the Branches having a great many sharp Thorns growing on them: The Leaves are oval, sharp-pointed, larger than either Orange or Lemon leaves: The Flowers are white, like Orange-flowers, which are succeeded by very large oval Fruit, of a pale-yellow or lemon Colour; on the Outside somewhat rugged, and full of Protuberances; the Inside is white, fleshy, and thick, containing but a small Quantity of Pulp in proportion to the Bigness of the Fruit, with several Seeds like those of Lemons.

Some are of Opinion, that the Citreum is that celebrated Tree, whose beautiful and alluring Fruit was forbidden to our first Parents in Paradise; for which Reason the Citron is also call'd *Penum Adami*. In the Days of *Pliny* the Fruit was not eaten; and, according to *Salmasius*, *Plutarch* informs us, that they only began to be eaten a little before his Time; but, on account of their grateful and fragrant Smell, they were laid among Clothes, and were esteemed effectual for preserving them against Moths. According to *Athenæus*, the Citron was laid in Chests among Clothes, as a thing of uncommon Value and Excellence. It was also esteemed beneficial in Cases where mortal Poisons had been drank, and in order to sweeten the Breath; for if any one squeezes the Juice of the Citron-peel into his Mouth, and swallows it, after being boil'd in Broth, or any other Liquor, it procures a sweet Breath. The dry'd and fresh Citron, used before Meals, is said to resist all Poisons, according to the Experience of *Athenæus*, who also informs us, "That the whole Citron, together with its Seed, boil'd in the best Honey, till it is entirely colliquated, proves an effectual Antidote against all Poisons, if a small Quantity of the Liquor is used every Morning." Besides, *Dioscorides* informs us, that the Seeds of the Citron, drank in Wine, resist Poison, render the Body soluble, procure a sweet Breath, and that they are principally used by Women against that Species of Disorder call'd *Alalucia*. *Pliny* also informs us, that the Seeds, when exhibited in Vinegar, are good against a Weakness of the Stomach. According to *Matthioli* ad *Dioscor.* *Galen*, when speaking of the Medicinal Virtues of the Citron, uses the following Words: "The Seeds are possessed of a highly acid and dry Quality, so that they are dry and cold in the third Degree." But *Matthioli* observes, that these Words are not to be understood of the genuine Seed, but concerning the acid Juice of the Citron, by which the Seed is every-where inclos'd, as is obvious from the following Words. "Its Peel is also drying, but highly acrimonious; but, though it is drying in the second Degree, it is not cold, but temperate, or nearly so. Besides, its Pulp also contains a thick Juice, which is of a cold and pituitous Quality; for this is also eaten as well as the Peel. The Seed is unfit for being eaten, as also the Kernel contained in it, which is the genuine Seed. It is bitter, and possessed of a digestive and drying Faculty, receding from temperate in the second Degree." The Leaves are also of a drying and digesting Nature. *Paulus Aegineta* also makes mention of a purgative Medicine call'd *Diacitrium*, which is composed of the Peel and Pulp of the Citron, with Water, boiled to a third Part, to which Honey is afterwards added, and Scammony and long Pepper sprinkled upon them. From what has been said 'tis obvious, that the Citrons were eaten in the Days of *Galen*. From *Apicius* also, *Lib. 4. Cap. 3.* we learn, that they were used as Food; but, for this Purpose, they were chosen with a sweet Pulp, which, according to *Palladius*, the Antients had a Method of procuring by macerating the Seeds for three Days in Hydromel, or in Sheep's Milk, which is still preferable. Others, according to the same Author, had a different Method of obtaining this End. These are almost all the Virtues which, in the Works of the antient *Greeks* and *Romans*, we find ascribed to the Citron; but as the Tree, which bears this Fruit, is much cultivated in *Italy*, *Portugal*, *Spain*, and the South of *France*, the Writings of the Moderns abound with Observations on the Virtues of this Tree, and its several Parts. Thus the Leaves are said to be possessed of an aromatic Quality, for which Reason they are thought to be of a discutient drying Nature, and are therefore prescribed for the Cure of Wounds. The Juice is also express'd from the tender Leaves, and young Buds; then it is mix'd with *Venice Turpentine* in a glazed earthen Vessel, which is to be well covered. When this Mixture is subjected to the Fire, it is to be suffer'd to boil till the Citron-juice is thought to be consumed; and when the Substance is become tepid, it is strained, and the Part affected anointed with it, as Necessity requires. When the superfluous small Branches are taken off, and cut into large Portions, an Oil is extracted from them by Distillation with Water, which is of a whitish-green Colour, a grateful Smell, and highly beneficial in the Cure of several Diseases. Thus, according to *Ferrarius*, thirty or forty Pounds of the Leaves, and tender Branches, yield an Ounce of Oil. The Flowers, by their grateful Smell, and fragrant Scent, sufficiently discover their aromatic, ana-leptic, and heating Quality. According to *Ferrarius*, in Places where these Trees are produc'd in great abundance, such as *Regio*, and other Parts of *Sicily*, an Oil is obtained from the

Flowers, by Distillation with Water, which is of a yellowish Amber-colour, a faint Smell, but, at the same time, of singular Use in Medicine; but he tells us, that scarce an Ounce of this Oil is to be obtained from fifty or sixty Pounds of these Flowers. They are also, like other Flowers, preserved with Sugar, and used as a Sweetmeat. They are of a cordial Nature, and generally prescribed in Electuaries. The Virtues and various Uses of Citrons have gradually, and at different times, been discover'd by the Experiments of different Persons. We have already seen, that the Antients put them among Clothes, not only for the Fragrance of their Smell, but also to preserve them from Moths; that they look'd upon them to be Antidotes against Poison, and that they used them as Food. According to *Ferrarius*, *Bedreddin*, an *Arabian* Author, tells us the following Story concerning the Virtues of the Citron: It is reported, says he, that, among the *Persians*, a Man celebrated for Wisdom, and dear to King *Chosroas*, was at last deprived of the Favour and Countenance of his Prince. Upon this, being clapt in Prison, he, by the King's Orders, had his Choice of only one Species of Aliment for his Subsistence, and to all the others he preferred Citrons. When he was asked the Reason of this Choice, he answered, "The grateful Smell of the Citron cheers my Spirits; its Skin and Seed are cordial, and revive my Heart; its internal Peel supplies the Room of Food, and its Pulp that of Drink." *Dominicus Panciroli*, in his *Iatrologismi*, or *Observationes Medicinales*, *Pentec. 2. Obs. 36.* gives us an Account of a Patient labouring under an Atrophy, who, being just at the Point of Death, longed for Citrons, and upon eating a large one, which weigh'd four Pounds, he began immediately to grow better, and at last recovered entirely. In *Brazil* a Piece of Citron is used, by way of Suppository, for curing a particular Species of Ulcers in the *Intestinum Rectum*, which are frequent in that Country. An entire Citron, stuck full of Cloves, is by some ordered to be carried in the Pocket, and frequently applied to the Nose, as a Preservative against contagious Diseases. *Guido Patin*, a celebrated Physician, highly extols this Fruit, and gives it the Preference to some of the Shop-cordials, which have rather the Name than the real Virtues of a Cordial; and he affirms, that in all malignant Disorders, putrid and pestilential Fevers, more infallible Relief is to be expected from a few Citrons, than from all the various Preparations of Oriental Bezoar. *Diemerbroeck*, in his *Treatise de Peste*, *L. 3. C. 2.* affirms, that all the Parts of the Citron are possess'd of an alexipharmic Quality; for which Reason, in a Plague, he orders the whole Citron to be cut into Slices, and boil'd among the Patient's Victuals, or mix'd with his common Drink. He also prepared a grateful Drink from Citrons, in the following manner:

Take three Citrons, full of Juice; cut them, together with the Peel, into small Slices; then, putting them in a Glass Vessel, add of Spring or Carduus-water, and of Rose-water, each half a Pint; of small White-wine, one Pint; as much white Sugar, or Syrup of Lemons, as is sufficient to render it moderately sweet. Mix all together for Drink. This Preparation is what is commonly call'd *Lemonade*, and is highly extol'd for extinguishing Thirst, and a refreshing Quality.

There are various other Liquors prepared from the Citron, which are better calculated for the Purposes of Luxury than those of Medicine. The *Citronelle* of the *French*, for Instance, or what we call *Barbadoes Water*, is prepared in the following manner:

Take of the yellow Citron-rind, dried in the Sun, three Pounds; of *French Brandy*, six Pints: Let them stand in Infusion, in a cold Place, for a Month, in a Glass Cucurbit, with an Alembic and Receiver adapted to it; then distil in *Balneo Mariae*. When the strongest of the Spirit is drawn off, add to the Remainder the Pulps of Citrons; and five or six Days after distil a Liquor, which serves to render the former Spirit weaker. Add to the Mixture a sufficient Quantity of Sugar; or, in order to give it a more grateful Taste, a proper Quantity of the Water of Orange-flowers.

The *Ratafia Citri*, so much esteem'd by Persons of a delicate Turn, is to be found in *Leмери's Pharmacope Universelle*. We shall here briefly consider the several Parts of the Citron.

First, then, as to its yellow Rind; it is of a fragrant Smell, recruits the Spirits, and has an acrid Taste. In consequence of the fragrant and highly penetrating Oil, with which it abounds, it is a highly grateful Aromatic, of a corroborating, stimulating, heating, inciding, and discutient Quality; and may be properly prescrib'd in Cases where a Languor is produced by a Defect of the Oscillatory Motion of the Muscles, since, in such a Case, a proper Stimulus is required: Hence it is a beneficial Medicine



Medicine in Weaknesses of the Stomach, Flatulences, and Cachexies. Hence the Reason is obvious, why 'tis class'd among the carminative, antihypochondriac, antiscorbutic, stomachic, and antifebrile Medicines. It is added to several Dishes and Liquors, either entire or rasp'd down, not only with a View to give them a grateful Flavour, but also as an Aromatic, in order to correct their cold and flatulent Qualities. By the Confectioners this Rind is used in various Preparations. When cut into Slices, and incrustated with Sugar, 'tis what we call *candied Citron-peel*; which is not only grateful to the Taste, but corroborates the Stomach, in Cases where its Weakness arises from a Laxity of the Fibres. The *Italians* prepare their *Orschato* of the yellow Rind of the Citron, beat with Melon-seeds in Water, which is a Drink of a grateful Taste, and of an analeptic and refrigerating Quality.

Secondly, the white Skin, lying immediately under the yellow Rind, and which, when eaten, is of difficult Digestion, is said to be possess'd of lithontriptic Qualities; and, according to *Ettmuller*, when distil'd with the Fruit of the Alkekengi, it yields an elegant nephritic Water. In the Shops it is scarcely used, except for the *Electuarium de Citro*, and stomachic Lozenges; but, by Confectioners, it is used for various Purposes.

Thirdly, the acid Substance, or Pulp, lying under this Skin, is eaten crude, either with or without Sugar, in Cases where the Heat of the Body is to be lessen'd, or the Orgasm of the Blood check'd: Hence, in all hot Disorders, it is accounted an excellent Medicine for quenching Thirst. It not only refrigerates and cools the Body, by lessening the too violent Motion of the Humours, but also resists Putrefaction. For this Reason the Pulp is either boil'd among Aliments, or its Juice is express'd crude upon Fleashes, Fish, and in various Broths, not only for the sake of its grateful Acidity, but also with a View to correct their urinous Smell, their Rancidity, or their Tendency to Putrefaction. It is of singular Use for these Purposes, especially in the Summer-time, as it procures an Appetite, and promotes Digestion: Hence it is accounted an excellent Medicine in Fevers, and against the Scurvy, for correcting the muriatic and alcalescent Acrimony of the Juices. *Ettmuller* informs us, "That, both in preventing and curing burning malignant Fevers, no Medicines ought to be exhibited without an Admixture of Citron-juice, whether mix'd with the Patient's Drink, or express'd upon his Aliments; for when the Spirits are exhausted by profuse Sweats, and the Patient is seiz'd with an uncommon Weakness, upon exhibiting Citron-juice, and other Preparations of it, as also Decoctions of the Citron, in Imitation of *Mynsicht*, their Acidity gently coagulates the too fluxile Blood, procures it a due Consistence, prevents its Division into too minute Particles, resists Malignity, and proves highly cordial. Besides, the Citron-juice is of a diuretic Quality; for which Reason 'tis generally recommended against nephritic Disorders. It is said to be a present Remedy in the Scurvy, and Disorders produced by a contaminated State of the Atmosphere. The *Dutch*, when they undertake a Voyage to the *East Indies*, or any other far distant Country, where they generally contract the Scurvy, take along with them Citrons, and Casks full of their Juice, as a Cure for the Scurvy, as the volatile Acid of the Citron corrects the rancid Acid of the Scurvy." *Ferrarius* informs us, that there was a German Physician, who, upon the Approach of the Paroxysms in intermittent Fevers, used to exhibit two Spoonfuls of the Citron-juice, mix'd with one Spoonful of *French Brandy*; and that, by means of every such Dose, the Fever became proportionably milder, and was, in a few Days, totally removed; besides, the intense Thirst, and feverish Heat, were mitigated by this Medicine. He also affirms, that the salutary Effects of this Medicine were sufficiently experienced, in the Cure of a tertian Fever, which raged at *Rome* in the Summer-time. But because, in a Plague, the most formidable of all the hot Disorders, the Humours of the human Body have a strong Tendency to Putrefaction, 'tis easy to perceive, that the Citron-juice is justly class'd among the antipestilential Medicines. Besides, its Virtues are highly celebrated in Disorders arising from the Exhibition of acrid and corrosive Substances, the noxious Qualities of which are observed to be resisted by Acids. Thus, in *Baptist du Hamel's Historia Reg. Scient. Acad.* we are inform'd, that those who were at the very Point of Death, in consequence of having taken Euphorbium, were effectually cured by an Exhibition of Citron-juice: Hence 'tis obvious, for what Reason, and against what kinds of Poisons, the Citron-juice may be recommended as an Antidote; and that *Stenzelius*, in his *Toxicologia*, is in the right, when he says, "There is no doubt to be made, but the acid Juice of the Citron resists the alcaline Poisons of Animals; but I much doubt, whether the Citron is an universal Antidote for all Poisons, as *Athenaus* maintains." It is said to prove effectual against that Species of Poison call'd *Aqueta*, which is a Liquor prepared from Arsenic. *Hoffman*, in his *Clavis Schrod.* affirms, that the Citron-juice cured a Man bit by a Viper; but *Charas*,

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in whose House the Accident happen'd, charges his Story with Falshood. And *Redi*, in his *Opuscula*, T. 2. does not hesitate to deny the alexipharmic Virtues of the Citron against the Bites of Vipers; and pronounces the Story of *Athenaus*, concerning the Virtues of the Citron against the Bites of Asps, to be entirely fabulous: Hence we understand, why the Citron-juice contributes to the Cure of a *Malacia*, or a depraved Appetite, wherein some Women, especially when pregnant, long for uncommon and unusual Aliments; because, for Instance, it subdues and corrects the predominant alkaline and rancid Acrimony, which is the Cause of the Disorder. It may be class'd among the diuretic and sudorific Medicines, because, by its acid Quality, it stimulates the Solids, whilst, at the same time, it dilutes and attenuates the Humours. But whether its resolvent Virtue, as *Quercetan* would have it, is sufficient to dissolve stony Concretions form'd within the Viscera, is what we will not take upon us to determine, since we have no Experience with respect to this Particular. But the Reason that Author assigns, which is, that, without the Body, it is capable of dissolving stony Concretions, Pearls and Corals, does by no means appear satisfactory, since Vinegar does the same; which, however, is not celebrated as a Lithontriptic, or Menstruum for Stones of the human Body. But since it is possess'd of a Quality, by means of which it checks the exorbitant Motions of the Humours, and prevents inflammatory Influxions or Obstructions, it is not to be denied a certain Efficacy against nephritic Pains, which almost always follow inflammatory Stagnations; or, when they last for any considerable time, bring on such Stagnations. But the Citron-juice is, in a more particular manner, beneficial in alleviating nephritic Pains, when it is exhibited with Oil of sweet Almonds. But they who recommend an Ounce or two of it, drank in White-wine, for expelling the Stone, must be certain, that the Stone is so situated, that it may be convey'd either from the Ureters to the Bladder, or from the Bladder without the Body; and that the Patient is capable of supporting the Stimulus; otherwise lubricating and relaxing Medicines alone are more properly to be used. This Juice is said to be a Remedy against Worms of the Intestines, for no other Reason, but because Acids prove fatal to them. Since we have seen, that, in Cases where the Citron-juice produces any happy Effects in the human Body, it acts as an Acid, it is obvious, that, by an unseasonable or immoderate Use of it, the same Effects may be produced as by other Acids of the simple Kind, which generate those Diseases arising from a predominant Acid. But when the Citrons are unripe, and abound with an acid, crude, and harsh Juice, like those generally fold in the Northern Countries, the too liberal Use of them produces an acid Acrimony, which, by its astringent Quality, generates various Diseases and Obstructions. The fatal Effects produced by eating Citrons too plentifully, we learn from the Case of a Woman, related in the *German Ephemerides*, who, after eating six or seven of them a Day for a Year, died of a scirrhus Tumor of the Pylorus and Duodenum, so that there scarcely remain'd room sufficient to introduce a Quill. The Citron-juice seems, in my Opinion, says *Rieger*, to contribute to the Protraction of Life, for no other Reason, than that it corrects the alcalescent State of the Fluids, and consequently belongs to that Species of Aliment which resists Putrefaction: But the frequent and daily Use of it seems far safer, when it is mix'd with other Liquors, than when it is exhibited alone. Thus, for Instance, when reduced to a Syrup with Sugar, it is mix'd with Pissans, which may be drank at Pleasure, to alleviate the Heat and quench the Thirst; or *Lemonade* may be prepared of it, in which Liquor the Juices of ninety Citrons were consumed, in the Space of twenty-four Hours, to the Recovery of the Patient from a continued Fever, as we learn from a Case in *Blegny's Zodiacus Medico-gallicus*. *Ferrarius* is of Opinion, that the frequent Use of the Pulp, made up with Sugar, and boil'd, contributes much to the Preservation of Health, and the Protraction of Life; and, because these are Matters of the last Importance, we shall here translate the whole Passage from that Author. "The Case, says he, of *Joannes Baptista Martini* convinces me of the salutary Qualities of Citron-juice. This Man, for forty Years, from the Beginning of *March* to the End of *October*, every Morning almost, three Hours before Breakfast, took half a Spoonful of the above-mention'd Composition; but in the Evening, before he went to sleep, he took the third Part of a Spoonful of the same Liquor. This Evening Dose he did not swallow all at once, but suffer'd it to melt away gradually, that it might wipe away, and render fit for Expectoration, the Phlegm, which, in the Night-time, adheres to the Fauces and Thorax; as also, that it might extinguish the Thirst generally produced by the first Concoction. But in the Morning he swallow'd this Medicine at once, for dispelling, expectorating, or evacuating by Stool, the Phlegm of the Stomach, for rendering his Body soluble, for provoking Urine, preventing Putrefaction, and quenching Thirst. When, in the Winter Season, inclement southerly Windy blow'd, he used successfully this Medicine. By means of



“ this delicious and easily prepared Remedy, without the Assistance of any other, he preserved his Life, and enjoy’d good Health for so many Years; and, when he was almost eighty Years old, Age was not to him a Disease, according to the Proverb, but a healthy vigorous State of Life, employ’d in the Discharge of civil and domestic Offices, and blest’d with the grateful Reflections of a well-spent Life. In this Composition he was particularly careful, that the Acrimony of the Juice should be predominant, lest too great Sweetness should excite a Nausea. For this Reason he made up eight Ounces of Citron-juice, with twelve Ounces of Sugar; then boil’d them to a due Consistence, agitating them with a wooden Spatula, lest the Sugar should be burnt, and become red. To this Composition, before it was cold, he added an Ounce of the finest Sugar, coarsely pounded, that the Composition, when concreted, might be more grateful to the Taste. I myself tasted this Mixture, and must own, that the due Mixture of the Acid and the Sweet was highly grateful to the Palate.” The Pulp of the Citron is used externally for cooling Epithems, whilst, for Instance, in Fevers, in order to allay the Heat, Slices of it are applied to the Wrists of the Hands, and the Soles of the Feet. But I very much doubt, whether the Pores can be thus contracted, and Transpiration stopt, by cold Applications, without Fear of some Danger arising from a Retropulsion of the perspirable Matter to the internal Parts. After impure Coition the Citron-juice, mix’d with Water, is said to be of great Use for washing the Penis. It is also possess’d of a cosmetic Quality, and removes Spots, Freckles, Ring-worms, and Pustules of the Face, especially when it is mix’d with Camphire and White-wine. *Nobelius* informs us, that, according to *Jonston*, a Citron, cut thro’ the Middle, sprinkled with Flower of Sulphur, and warm’d in hot Ashes, contributes to the Cure of the Itch, if the Parts affected are anointed with it. This Effect it produces by its Juice; for which Reason, Lemon-juice may also be added to the Powders, of which the Ointments against the Itch are composed. But general Evacuations ought first to be premised, lest, even in this Case, the Health of the Patient should be endanger’d by a Retropulsion of the perspirable Matter. But, since the Skin is render’d somewhat rough by the Use of acrid abstergent Medicines, it may be again smooth’d by Milk, or Emulsions of mild farinaceous Substances, as the cold Seeds, and sweet Almonds. The Citron-juice is also used, instead of Vinegar, for coagulating Milk, and separating the Whey. That the Citron-juice may be readily had, when Citrons themselves cannot be found, the *Italians* sell the express’d Juice, impregnated with Sugar: This they call *Aigre di Cedre*. In *Egypt* the express’d Juice of the Citrons, after having stood some time, till it becomes clear, is put up in Casks, and kept for Sale. The Inhabitants of *Ceylon* boil it in earthen Vessels, till it becomes black, like Pitch; after which they keep it for Use. From the Sediment or Fæces of the Juice, when kept in Jars for Depuration, according to *Pomet*, is prepared, by Distillation, the *Oleum Citri vulgare*, which is greenish, fragrant, and transparent, and of which, for the most part, about three Pints are obtain’d from fifty Pounds of the Fæces. According to *Nobelius*, an essential Salt may also be obtain’d from the acid Citron-juice, by boiling it, when express’d and strain’d, to a Consumption of the Humidity; and afterwards putting it by in a cool Place, that the Crystals may adhere to the Sides or Bottom of the Vessel. These Crystals partake of the same Nature with the Juice, and are of a refrigerating Nature, and resist Putrefaction. They also serve to prepare the *Syrupus Citri Siccus*.

Fourthly, the Citron-seeds are possess’d of an aromatic Quality, and are used principally in Emulsions against Fevers, and other malignant Disorders; as also against the Measles, Small-pox, and Worms of the Intestines. From their aromatic Quality we must account for their Efficacy, commonly ascrib’d to them, against Poisons; since, by increasing the Motion of the Humours, it promotes a free Perspiration, and, like other Aromatics of a diaphoretic Nature, affords a proper Opportunity of dispelling and eliminating the peccant Matter thro’ the cutaneous Pores. According to *Ferrarius*, *Pisanelus* ascribes, that, when drank in Wine, it is effectual against the Haemorrhoids, and Poisons of all Kinds, but more especially that of Scorpions. The Oil, express’d with hot Instruments from these Seeds, after they are unhusk’d and bruis’d, is, by *Porta*, in his *Magia Natural*, said to be effectual against Poisons. He also ascribes, that it is the most proper Menstruum for extracting the Odours from Musk, Amber, and Civet, and for preparing Ointments, because it is long before it becomes rancid. *Ferrarius*, from *Badreddinus*, informs us, that the *Persians* use it in their Lamps. In the *Pharmacopœia Augustana*, it is call’d *Oleum à granis Citri*, and is recommended in arthritic Pains, and the Swellings which succeed them. It is also said to expel the Stone from the Kidneys and Bladder. In a Plague it is recommended as a powerful Alexiterial; and some pretend, that it kills Worms, either when exhibited internally, or when the Belly is anointed with it.

Besides the more important and uncommon Preparations of the Citron, already specified, there are several others directed in the Dispensatories, and kept in the Shops; such as the *Conditum totius Citri*, in the *Institutiones Medicæ* of *Sennertus*; the *Syrupus de toto Citro essentificatus*, in the *Dispensat. Brandenburg.* the *Essentia Corticum Citri*, in the same Dispensatory; the *Aqua Citri composita ex Succis*, *ibid.* the *Aqua Citri cum spiritu vini*, *ibid.* the *Aqua Corticum Citri*, in the *Pharmacop. Paris.* the *Decoctum Citratum*, in the *Dispensat. Brandenburg.* the *Electuarium de Citro Mesua*, in the *Antidotarium Bononiense*, which, in *Lemery’s Pharmacop.* is call’d *Electuarium ex Citro Stomachicum Mesua*; the *Electuarium de Citro*, in the *Pharmacop. Paris.* the *Electuarium de Citro Tabulatum*, in the *Pharmacop. Bruxellensis*, which, in the *Pharmacop. Argentorat.* and that of *Lemery*, is call’d the *Electuarium de Citro solutivum*; the *Elixir Citri*, in the *Dispensat. Brandenburg.* the *Elixir Citri purgans*, in the *Pharmacop. Argentorat.* the *Essentia Citri*, in the *Pharmacop. August.* the *Extractum Diacitri*, *D. D. Hieronymi Reusneri*, in the *Phar. August.* and *Argentorat.* *Morsuli Citri ex succo*, in the *Pharmacop. Argentorat.* the *Syrupus de Corticibus Citri*, in the *Dispensat. Brandenburg.* the *Syrupus Acetositatis Citri*; the *Syrupus à Citro tota*, in the *Dispensat. Brandenburg.* the *Syrupus de toto Citro Essentificatus*, *ibid.* and the *Unguentum de Citriis*, in the *Dispensat. Brandenburg.* There are so many other Preparations of the Citron, in the practical Authors, and Writers of Dispensatories, that a bare Catalogue of them would tire the Reader’s Patience, without informing his Judgment.

The *Syrupus à Succo Citriorum*, or Syrup of the Juice of Citrons, is thus prepar’d:

Take one Pint of the clear Juice of Citrons; of fine Sugar, two Pounds; and boil into a Syrup, with a gentle Fire.

The *Syrupus Corticum Citriorum*; or Syrup of Citron-peels.

Take five Ounces of the outer yellow Citron-peel, full ripe, and fresh; of Kermes-berries, or, in their stead, of the imported Juice, two Drams; of Spring-water, three Pints: Steep them together, for one Night, in a Bath-heat; and, to the strain’d Liquor, put two Pounds and a half of fine Sugar; and, with a moderate Heat, boil up into the Consistence of a Syrup. *London Dispensatory.*

The same Virtues are attributed to the *Citrium Medulla dulci*, sweet Citron, as to the sweet Orange.

CITRINATIO. Complete Digestion. *Theatrum Chymicum*, Vol. 2. Or, according to *Rulandus* and *Johnson*, Resuscitation, or Resurrection.

CITRINELLA, *Gesfn.* from its yellow or lemon Colour, is a small Bird, about the Bigness of a Lark. It sings agreeably, and lives upon Seeds. It contains much volatile Salt and Oil, and is judg’d very proper to be eaten for the Epilepsy. *Lemery des Drogues.*

CITRINULA is the Flammula or Spearwort, an Herb much used by *Paracelsus*, as appears in his Writings. *Johnson.*

CITRINULUS. A Stone between a Crystal and a Beryl, called, by *Paracelsus*, *Saxifragus*. *Citrinulus*, in *Rulandus*, is a pale Crystal. They make of it a Liquor, in manner of an Alkali, against the Stone. *Castellus.*

CITRONES. A Term which occurs in *Paracelsus*, *Philos. Atheniens.* where he says, that, among other Bodies to be found in the Sea, there are *Corallia*, *Trima*, and *Citrones*; but he no-where explains what he means by it. *Castellus.*

CITRULLUS, Offic. *Citrullus Officinarum*, Ger. 767. Emac. 913. *Citrullus folio Colocynthis scelo, semine nigro; quibusdam Anguria*, J. B. 2. 235. *Citrullus*, *Anguria*, *Tetraguria*, Chab. 133. *Anguria*; *Citrullus dicta*, C. B. Pin. 312. Raii Hist. 1. 643. Tourn. Inst. 106. Elem. Bot. 89. Hist. Oxon. 2. 228. Boerh. Ind. A. 2. 79. Rupp. Flor. Jen. 43. *Anguria sive Citrullus vulgarior*, Park. Theat. 771. *Citrullus jacea Brasiliensis*, Marcg. 22. *Citrullus jacea sive Anguria*, Pil. 262. CITRUL, or WATER-MELON.

Among the later *Greeks* it is called *ἀγγύριον*, from *ἀγγύς*, which signifies any Vessel or Receptacle. This Name was probably bestow’d upon it, because the Shell of the Fruit, when the Pulp is taken out, may serve as a Vessel for holding any Liquor. It spreads along the Earth small rough Twigs, with large Leaves, cut in deep Jags, rough and uneven. From the Sinuses of these Leaves spring small Tendrils, as also Foot-stalks sustaining yellowish Flowers, which are succeeded by large round Fruit, capable of filling both one’s Hands. The Rind is somewhat hard, but smooth, and without any Tubercles, of a darkish-green Colour, and variegated with Specks of a faint-green. Its Pulp is like that of the common Cucumber, white, firm, and of a grateful Taste. The Seed is placed in a fungous Substance, which is lodged in the Medullium. It is oblong, broad, flat, black, rough, and furnished with a pretty hard Husk, under which there is a white Pulp, which, like that of the



the Gourd-seed, is grateful to the Palate. The Rind of the Citrul is not always of the same Colour; for in some it is green, whereas in others it is variegated with whitish Spots; in some the Pulp is red and sweet, and in others white, and not so grateful to the Palate; the Seeds in some are black, and in others of a redish-brown. It grows spontaneously in hot Climates, such as *Apulia, Calabria, Sicily*, and other Countries which lie towards the South. In the more northerly Regions it is sown, and bears, but never arrives at perfect Maturity. It flowers in *August*, and its Seeds are ripe in the Autumn, in *Italy, Spain*, and other hot Climates. In the *Indies* it thrives no-where better than in *Brasil*, where its Pulp is sweet and succulent, like those imported yearly into *Muscovy* and *Peterf-burg* from *Astracan* and *Casjan*, under the Name of *Arbus*, which is, perhaps, borrowed from the *Turks*, who call the Water-melon *Carpus*. They are capable of being preserved for a considerable time without Corruption; but for this End they must be pulled before they are entirely ripe. Their fungous Pulp or Marrow is a grateful Aliment, not very nourishing, aqueous, but justly celebrated for its moistening, laxative, diuretic, and refrigerating Qualities. In these respects they agree with the Cucumber; but in this they surpass it, that, being free from its viscid Quality, they are sooner digested, and do not prove offensive to the Stomach, though eaten in large Quantities. They are eaten raw, but Luxury, the fruitful Parent of Cookery, has laid a Foundation for their being prepared in a thousand other Forms. The Seeds are, by Physicians, classed among the Four greater cold Seeds. They provoke Urine, but less powerfully than the Seeds of the Pompion. They are principally used in cooling Emulsions. Not only the Species of Citrul, of which we now speak, is possessed of these Qualities, but also various other Species growing out of *Europe*, which are grateful to the Palate and Stomach, in proportion to the Heat of the respective Climates, in which they are produced.

The Seed is the only Part used here, being one of the great cold Seeds, and is of the Nature of Melon and Cucumber-seed, agreeing with them in their cooling diuretic Faculties.

*Boerhaave* calls this Plant *Anguria*.

CITTA, κίττα. A Disease incident to Women. See PICA.

CITTITES. The same as AETITES, which see. *Rieger*. CIVETTA. See ZIBETHUM.

CLADOS, κλάδος, in *Hippocrates* πέλ' φύς. παδ'όν, is a Slip taken from a Tree to set in the Ground.

CLÆR, A Chymical Term of Art, signifying Bone-flour, which is prepared of the Bones of the fore Part of the Cranium of a Calf, depurated from Fat by Boiling, afterwards calcined to a Whiteness, and very finely levigated on a Porphyry-stone, then moistened with fresh Water, and calcin'd again in an Earthen Pot closed, and, after Refrigeration, reduced again to a very subtil Powder, which is sprinkled through a Sieve upon Earthen Vessels, to prevent their contracting any Chinks. *Castellus*.

CLAKIS. A Name, in *Rieger*, for BARNACLES, which see.

CLAMOR, βοή. An Intenseness of the Voice, a loud Outcry, a Clamour. This is sometimes the Cause of a Rupture of the Vessels, and sometimes of a Disorder like an Inflammation about the Membranes of the Fauces and Muscles, which may be compared to that ulcerous and inflammatory Lassitude, which affects the Hands, Legs, and Loins, after excessive hard Labour, the spirituous and humid Particles being exhausted, and the Fibres and Membranes dry'd and contracted. These are *Galen's* Observations. Sometimes a Clamor, as *Paracelsus* says, is a Symptom of a tartareous Disease, and proves the Presence of a Tartarus, because it burns and cuts like a Knife. *Paracel. de Tartar. Lib. 2. in Notis*. A Clamor is sometimes also a sort of Remedy, and prescribed as such in order to rouse Persons out of a Lipothymy, or Syncope. *Castellus*.

CLANDESTINA. A kind of Plant, with a monopetalous, personated Flower, tubulated in its lower Part, and its upper divided into two Lips, the upper of which is fornicated, and the lower divided into three Parts. From the Flower cup, which is tubulated and crenated, rises the Pointal, which perforates the Bottom of the Flower, and becomes an oblong unicapsular Fruit, which, dividing into two Parts, discharges, with a Spring, or elastic Force, its Seeds, which are of a roundish Figure.

I know but one Species of *Clandestina*, whose Varieties are the *Clandestina* with the bluish, and that with the white Flower. *Tournefort. Instit.*

CLANGE, κλαγγή, is properly the Cry of Cranes and Geese, a shrill Noise; hence κλαγγώδης φωνή, "a shrill Voice," an Expression used by *Hippocrates*, particularly in *Prophet*, where *Galen*, in his *Comment.* observes, that κλαγγώδης φωνή is occasioned by a Dryness of the vocal Organs, as βραγχώδης, "a hoarse" (Voice) is of their Immoderate Humidity.

CLARETA. The White of an Egg. *Rutandus*.

## CLARETUM.

*Claretum* and *Clareta* signify what in *English* we call Claret. By this Name, in Medicine, is generally imply'd an Infusion of aromatic Powders in Wine, which is afterwardsedulcorated with Sugar or Honey. This Species of Liquor is also called *Vinum Hippocraticum*, and, by the *Germans*, *Hippocras*, because, when the Infusion is finished, it is strained thro' *Hippocrates's* Sleeve, as 'tis commonly call'd. It is prepared of various Aromatics, and other Ingredients, according to the different Intentions to be answered. Thus, for Instance, there is a laxative Claret in *Schroder's Pharmacopæia*; and another, bearing the same Title, in *Zwelfer's Pharmacopæia Regia*. *Schroder*, in the above-mention'd Work, has also a purgative Claret, which he calls *Vinum Hippocraticum Antimoniale*. *Barchusen*, in his *Synopsis Pharmaciae*, gives us Directions for preparing a purgative Claret; and *Zwelfer*, in his *Pharmacop. Regia*, gives us a Recipe for a hydragogue Claret. Other Formulas of preparing Claret, suited to different Intentions, occur in different Authors, to which every one may have Access. Some, for making the Infusion, use Spirit of Wine, both simple, and impregnated with Aromatics; others mix distil'd Waters with the Wine, or the Spirit of Wine. *Forestus*, in *Obs. Med. Lib. 3. Obs. 11.* also gives the Name of *Claret* to an Infusion prepared of one Pint of Spring-water, half an Ounce of the best Cinnamon, and three Ounces of the whitest Sugar. In tertian Fevers he ordered this Infusion to be drank instead of Wine: And *Geiger*, in his *Kelegraphia*, gives us the following Recipe for quenching Thirst:

Take of pure Spring-water, two Pints; of Sugar-candy, one Ounce; of the Powder of red Sanders, three Drams; of Cinnamon, two Drams; and of the Flowers of red Roses, one Dram: Infuse in a close-stopt Glass, situated in a warm Place, for six Hours; then strain off the Liquor, and add one Scruple of the Spirit of Vitriol; of Lemon-juice, and of the Julaps of Violets and Roses, each one Ounce. Mix up into a Claret.

Some will have Claret to be different from the *Vinum Hippocraticum*, because the former isedulcorated with Honey, and the latter with Sugar; and because the Claret is generally rendered yellow by means of Saffron, whereas the *Vinum Hippocraticum* is red, since the Powders are infused in a Wine which is naturally red, and not made so by Art. Whoever intend to make extemporaneous Claret, use Spirit of Wine, impregnated with aromatic Powders, or a certain aromatic Essence, called the *Tinctura pro Clareto*, of which they pour a few Drops into a Glass of Wine. Without giving the particular Recipes, which, in the several Dispensatories, come under the Title of *Vinum Hippocraticum*, we shall only here take a View of those which come under the Denomination of Claret. In *Bauderon's Pharmacopæia* the *Clareta Simplex* is prepared in the following Manner:

Take of the best Aqua Vitæ, six Ounces; of Rose-water, four Ounces; of white Sugar, three Ounces; and of the best Cinnamon, one Ounce: Infuse all together for twenty-four Hours, in a narrow-mouth'd and close-stopt Glass Vessel; then strain the Liquor twice or thrice thro' *Hippocrates's* Sleeve. An Ounce of this may be exhibited in the Morning before Breakfast, in order to corroborate the Stomach, and dispel Flatulences.

The *Clareta Composita*, in the same *Pharmacopæia*, is prepared of aromatic and astringent Ingredients, which, when macerated in White-wine, are distil'd, with an Addition of Baum, white Sugar, and Cinnamon.

There is also another Species of Claret, which, in the *Pharmacopæia Parisiensis*, is call'd the *Claretum à sex Seminibus Carminativis*, and which is prepared in the following Manner:

Take of the Seeds of Anise, Fennel, Dill, Coriander, Caraway, and Carrots, each one Ounce: Bruise and macerate them in a close-stopt Glass Vessel, with a sufficient Quantity of Aqua Vitæ, which must rise four Fingers Breadth above them, exposing the Whole to the Heat of the Sun for three Weeks. Then strain the Liquor thro' brown Paper, and add to it a Syrup prepared of one Pound of white Sugar, and a sufficient Quantity of Chamomile, or Grass-water. Mix all together. A Spoonful or two of this may be exhibited for a Dose, and it is esteem'd an excellent Medicine in Flatulences proceeding from a cold Cause.

## CLARIFICATIO. Clarification.

The Apothecaries are said to clarify any thick and turbid Liquors, the expressed Juice of Vegetables, for Instance, Decoctions, or Syllips, when they render them more transparent, pure, and free from Faeces. This they do, either by placing the Liquor in a cool Place, allowing it Time to settle, that its  
more



more earthy and feculent Parts may gradually and spontaneously subside to the Bottom. This, in the Language of the Chymists, is call'd *Clarificatio per Subsidentiam*, or *Clarificatio per Residentiam*. Liquors are also clarify'd by *Filtration*, or *Colation*, by which Method the grosser Parts remain in the Filtrè, whilst those which are finer, and more subtile, pass thro' it. Fermentation is another Method of clarifying Liquors, because, by the fermentative Motion, their grosser Parts are carry'd to the Bottom. Liquors are also sometimes clarify'd by being boil'd a little with Whites of Eggs reduced to a Froth; for this Substance, in consequence of its glutinous Nature, adheres to the grosser Parts of the Fluid, which are afterwards to be separated by Filtration. Another Method of clarifying Liquors is by an Affusion of other Liquors, according to the Nature of the Liquor to be clarify'd; by which means it being render'd turbid, and a Precipitation produc'd, may become more clear and pure.

CLARUM. Any thing made of Crystal. *Rulandus*.

CLASIS, CLASMA, κλάσις, κλάσμα, from κλάω, to break, a Fracture. See FRACTURA.

The Verb κλάω is often used by *Galen*, *Lib. 2. de Mot.* to express such a Distortion or Reflexion of the Muscles as almost deprives them of Action; and so in *Hippocrates*, *Lib. de Fraet.* it is spoken of the Reflexion or Recurvation of a Member.

CLAVATA. The Name of a Suture. See SUTURA.

CLAVATIO. The same as GOMPHOSIS. See ARTICULATIO.

CLAUDIACON, κλαυδιακόν. The Name of a Collyrium, in *Aligineta*, *Lib. 7. Cap. 16*.

CLAUDICATIO. Lameness.

CLAVELLATI CINERES. Pot-ash. See the Article ALCALI.

CLAVICULÆ, in Anatomy, the Clavicles.

The two Clavicles are situated transversely, and a little obliquely, opposite to each other, at the superior and anterior Part of the Thorax, between the Scapula and Sternum.

Each Clavicle resembles an *Italic S*, being a long Bone, irregularly cylindrical, bent forwards near the Sternum, and backwards near the Scapula, as if it were made up of two Arches join'd endwise in opposite Directions, that which lies on the fore Part of the Breast being the largest. The Clavicles are more strait in Women than in Men.

The Clavicle is divided into a Body, or middle Part, and two Extremities, one anterior, inferior, and internal, which I term the Pectoral or Sternal Extremity; the other posterior, superior, and external, which I name the Humeral or Scapular Extremity.

The pectoral Extremity is the thickest, and of a triangular Figure, especially near the End, where it is a little enlarged, and shews a cartilaginous Surface with three Angles, of which the lowest is the most prominent, and turned a little toward the Cavity of the Thorax. Near these Angles there are several muscular and ligamentary Impressions, one of which, near the inferior Angle, is sometimes raised like a Tubercle.

The humeral Extremity is flat and broad, and two Sides may be considered in it, one superior, the other inferior; likewise two Edges, one anterior, the other posterior; and a small articular Surface.

The upper Side has several Inequalities, and in the lower there is a kind of oblong, rough, oblique Tuberosity. The posterior Edge is convex, thick, and uneven, being that of the small Arch of the Clavicle. The anterior Edge is concave, narrow, and smooth every-where, except near the great Arch, where it has a rough Impression. The articular Surface terminates this Extremity, being cartilaginous, turned obliquely forward, and of an oval Figure, like that of the Acromium, with which it is articulated.

The Body, or middle Portion, which, together with the pectoral Extremity, forms the great Curvature of the Clavicle, is not so thick as the Extremities. It is a little flattened both on the upper and lower Sides, and therefore two Edges may likewise be distinguished in it. The upper Side is pretty even, the lower something rougher, and a little depressed by a superficial Channel. The Edges are rounded, the anterior being convex, the posterior concave.

The inner Substance of the Extremities is cellular: The rest is more solid, consisting of very thick Sides, with a narrow Cavity, more or less fill'd with reticular bony Filaments.

The particular Situation of this Bone is easily understood from what has been said. The most uneven Side of the Body, and rough Side of the humeral Extremity, are always to be turned downward.

The Clavicle is articulated with the Acromium and Sternum by Arthrodia. The Articulation with the Scapula, by means of the Acromium, is as real and distinct as the Articulation with the Sternum, which last appears something extraordinary

in the Skeleton, where the small Notch in the Sternum is no-ways proportion'd to the broad Extremity of the Clavicle.

The Clavicles serve for Butteresses to the Scapulæ, and bound their Motions forward and upward; by their ligamentary Connections they likewise hinder the Scapulæ from running too far back, which might happen in those who drag Burdens behind them. They also give Insertion to many Muscles.

The sternal Extremity of the Clavicle is crufted over with a Cartilage, which is a little convex, and covers its whole triangular Surface; besides which it has another moveable Cartilage, common to this and the Sternum. See STERNUM.

The small cartilaginous Surface of the humeral Extremity of the Clavicle, answering to that of the Acromium, is much thicker in fresh than in dry Bones, and appears, like that of the Acromium, to be a little convex.

Between these two Cartilages of the Clavicle and Acromium there is, in some Subjects, a thin interarticular Cartilage, very smooth on both Sides.

The Articulation of the Acromium, with the Extremity of the Clavicle, is strengthened quite round by several small strong Ligaments, which go from one Bone to the other. These Ligaments lie very near each other, and are withal so tightly braced over the Joint, as to hide it altogether; and they appear more like a cartilaginous Covering than a ligamentary Texture. The internal Surface of these Ligaments is lined with the Capsula of the Joint.

When the small interarticular Cartilage is found, its whole Circumference is connected to these Ligaments.

The Articulation of the Clavicle with the Sternum is sustain'd by several Ligaments, fixed by one End, round the pectoral Extremity of the Clavicle, near the Edge of the triangular Surface, and from thence passing over the interarticular Cartilage, are inserted by the other End in the Sternum.

There is a long, narrow, strong Ligament, which goes from one Clavicle to the other, behind the Furca of the Sternum, being fixed to the internal Angle of the contiguous Extremities of the Bones. It may be called the interclavicular Ligament. *Winflow's Anatomy*.

#### FRACTURES of the CLAVICLES.

The Clavicle\*, on account of its transverse Position, but principally from its remarkable Tendernefs, is very often broken, sometimes in the Middle, sometimes near the Humerus, or the Sternum; but where-ever it happens, the Part next the Humerus, from the Weight of the Arm sustained by the Clavicle, descends below that next the Sternum. And therefore, tho' that Part of it next the Breast remains immoveable, yet, from the Tendency of the other downwards, they will of Necessity run one over the other.

It is not difficult to know when this Part is fractured; for, first, the Patient cannot lift his Arm; secondly, the Arm hangs inclin'd towards the Breast, whereas before it was extended upwards or backwards; and, thirdly, the Bones of the Clavicles having scarce any Muscles to cover them, a Fracture of those Parts must undoubtedly be evident to the Touch, Sight, and Hearing, especially upon the least Motion of the Humerus or Arm on the same Side.

The Reduction of the Bones of the broken Clavicle is not hard to effect, especially in a transverse Fracture; for the Humerus, with the connected Fragment of the Clavicle, is usually reduced with little Trouble, and replaced in its Seat by Help of the Fingers only. But it is far more difficult to keep the reduc'd Bones in their Place, especially in an oblique Fracture; for which there are two Reasons: First, the circular Bandage, with which the long Bones of the Arms, and other Extremities, are held very firm, are quite improper here on account of the Disposition of the Place or Part affected; and, next, the Weight of the depending Arm very easily pulls asunder what has been replac'd; so that it is no Wonder, if the Bones of the Clavicles are very often found either uneven, or else very infirm, after Agglutination, tho' we do not want Examples where these sorts of Fractures have been very firmly and happily restored, especially when the Patients take due care to keep themselves at Rest.

A Fracture of the Clavicle is reduced after the following Manner: The Patient is placed on a low Seat; and an Assistant, thrusting his Knee against the Patient's Back, between the Shoulders or Scapulæ, lays hold with his Hands on the Shoulders, and gently pulls them backwards, by which means the Clavicles are duly extended. While this is doing, the Surgeon, who stands before, endeavours with his Hands to reduce the Bones into their proper Place; which done, he orders an Assistant to hold them firmly in that Position. He then applies, first, above and below the Clavicles, a narrow, but thick Bolster, (*Tab. 30. Fig. 13.*) folded on one Side, in order to fill up the Cavities. Upon this, secondly, he lays two narrower Bolsters, in the Form of the Letter X (*Tab. 29. Fig. 11.*),

\* A Fracture of the Clavicle is by *Celsus*, *Lib. 8. Cap. 8.* called *Jugulum Fractum*; but all our modern Anatomists and Surgeons call this Bone the *Clavicle*, and understand the Word *Jugulum* in a different Sense.



Over all these, thirdly, he applies a Piece of thick Paper, (*Tab. 29. Fig. 12.*) accommodated to the Neck and Shoulders, and first dipt in Spirit of Wine or Oxycrate. Then, in the fourth Place, he is to put under the Shoulder a thick Fillet, rolled up, or a Ball, lest the Arm should again slip from its Position. And, in the fifth and last Place, he is carefully to apply a Bandage to the affected Part, and suspend the Arm in a Sling fixed about the Neck. Plaisters, whatever some may pretend, are, in this Case, generally found superfluous and useless.

But because the Arm is sometimes with great Difficulty kept back, and with still greater Difficulty conglutinated, unless retained in that Situation, Surgeons have, for the Retention of the Humerus, invented an Instrument, resembling the Letter T. This Instrument may be made either of Wood or Iron, and is represented by *Fig. 13. in Tab. 29.* Its Sides are almost three Inches broad, and covered either with Leather or Cloth. The Method of applying it is this: Its transverse Parts, A. A. are applied to both Shoulders or Scapulæ, whilst its longer Part, B. reaches along the Back. In the Hole, C. are fixed two strong Cords, by means of which, after passing the Arms thro' the Rings, A. A. this crucial Instrument is securely fixed to the Body. The more closely or loosely the longer Part, B. is ty'd about the Body, the more or less the *Humeri* are drawn backwards. But, in Cases where a very tight Tying of this Instrument does not answer the Intention, a longitudinal Bolster is to be applied to the Back, under the Part B. before the Cords are ty'd; for, by this means, the Clavicle is somewhat more powerfully raised, and kept back. The Rings, A. A. may be made either of Iron or Leather, and in such a manner, that they may be either lessen'd or enlarged at Pleasure.

When Splinters of the Bone are quite disengaged from the rest, and not only prick the adjacent Flesh, but also hinder the Reduction of the Clavicles, it seems necessary, in this Case, to make an Incision in the Skin, and extract them cautiously, before we proceed to the Reduction, and due Treatment, of the other Parts of the Bone. But if Splinters, still adhering to the Bones, should either prick the adjacent Muscles, or prevent the Reduction, they are either to be cut off with the Scissars represented by *Fig. 1. in Tab. 29.* or, when they are found sufficiently blunt, they are to be forced into their original Seat, by which means they are often conglutinated with the rest of the Bone: But, in making this Incision, great Care and Caution are necessary, lest the large Subclavian Veins and Arteries should happen to be wounded, and fatal Hæmorrhages by that means brought on.

#### LUXATIONS of the CLAVICLE.

Tho' the Clavicles, on account of their strong Ligaments, are rarely luxated, yet they are sometimes forced from the Sternum or Acromium, with which they cohere, by external Violence, such as Falls, for Instance, Blows, or the lifting of too heavy Burdens. As to the Cure of this Disorder, the sooner the Reduction is attempted, the more easily the Bones resume their natural Situation. On the contrary, the longer the Reduction is delay'd, the Cure is proportionably the more difficult; for old Luxations of the Clavicles are almost always found incurable.

The Clavicles may be separated from the Sternum in two Manners, and slip either to the internal Part towards the Aspera Arteria, or to the external Part. In the former of these Cases a certain Sinus is generally observed about the Part affected; and the Aspera Arteria, the adjacent Carotids, the contiguous Nerve, and the Oesophagus itself, are strongly squeezed and compressed; whereas, when the Clavicle is separated and disjoined externally from the Sternum, a preternatural Tumor is observed about the Joining of these Bones.

As for reducing luxated Clavicles, and retaining them in their natural Situation, the same Rules are to be observed as in reducing Fractures of the Clavicles; only the Surgeon must carefully observe to apply a proper Bandage, as soon as the Bones are reduced; for, if an accurate Application of Bandages is necessary in any Case, it is particularly so when the Clavicle is dislocated, especially when the Relief of the Patient has been delay'd for a considerable time; for, as the Clavicles are supported by scarce any Muscles, so also, in Cases of this Nature, their Ligaments are generally so hurt and weaken'd, that they are insufficient for supporting the Arm; for which Reason the Application of a proper Bandage is in this Case absolutely necessary.

Luxations of the Clavicles, happening at that Extremity towards the Acromium, are generally discovered with so much Difficulty, that, according to *Hippocrates*, in his Book *De Articulis*, and the skilful *Paré*, many of the most knowing Physicians and Surgeons have mistaken them for Dislocations of the Humerus, and accordingly subjected the Patients to unnecessary Pain to no manner of Purpose; for when a Case of this Nature happens, as *Paré* observes, the superior Part of the Clavicle protuberates upwards, and a Hollow or Cavity is observed in the Part where the Clavicle is separated from the Acromium. The Patient is also afflicted with violent Pains, and the Arms are

absolutely incapable of moving or raising themselves up. Unless, therefore, the Clavicles are speedily reduced, it is not to be wonder'd at, if the Arms of Patients, to whom this Misfortune has happen'd, should become so weak and paralytic, that they are not afterwards able to lift them to their Mouth or Head. *Galen*, in his Commentaries on the first Book of *Hippocrates de Articulis*, informs us, "That in Wrestling he had his Clavicle so far separated from the Acromium, that there was a Sinus, almost three Inches broad, between the two Bones;" but, by a tight Bandage, worn for forty Days, they were again united.

From what has been said it naturally follows, that the principal and most distinguishing Characteristics of a luxated Clavicle are, first, a Hollow or Cavity between the Clavicle and Acromium, which, as it is wanting in sound Persons, denotes a Separation of these Bones, which, in their natural State, adhere to each other. Secondly, the Patient cannot lift his Arm to his Head. In treating Disorders of this kind the Surgeon is to be particularly careful to extend and reduce the luxated Parts to their natural Situation, with as much Expedition and Dexterity as he possibly can; and, since the principal Means of Cure are placed in Bandages, these are to be apply'd with the greatest Care; for Patients, to whom the Bandages have, in this Case, been unskilfully or negligently applied, are seldom so perfectly cured, but a Stiffness or Weakness of the Arm remains. *Heister. Chirurg.*

#### BANDAGES for the CLAVICLE.

I. There are two Kinds of Bandage for a fractured Clavicle, with respect to the Distance of the Fracture from the Sternum, or the Os Humeri. In the former Case the most convenient Bandage is the *Capitalis Reflexa*, or Capeline, consisting of a Roller, six Ells long, and three or four Fingers wide, which is rolled up with two Heads. The Fracture then being duly reduced, the Cavities above and below the Clavicle are fill'd up with narrow Bolsters, upon which are laid thick Splints of Pasteboard, about an Inch in Breadth, along the Clavicle; and upon these again, at the Place of the Fracture, a third Splint, which is very small, and well covered, and secured with a square Bolster, and a Splint of very thick Pasteboard, (*Tab. 29. Fig. 12.*) to prevent the Clavicle from slipping out on either Side. This rightly done, the Surgeon orders an Assistant to hold his Hand upon the Dressings, while he applies the Middle of the Roller to the Top of the diseased Shoulder (*Tab. 58. Fig. 23. a.*); whence he brings down the anterior Head of the Roller obliquely over the Breast, *b.* carrying the posterior Head obliquely over the Back between the Scapulæ to the Axilla, *c.* of the sound Side, under which he passes it; and, bringing it up across the Breast to *d.* passes it over the anterior Roller; and, drawing it under the Axilla, *e.* of the diseased Side, brings it out towards the Back. Then the anterior Head of the Roller, which was taken in by the circular Motion of the other Head, is reflected over the diseased Shoulder, *f.* and taken in by the other Head of the Roller, on the Back, in its circular Progress towards the Breast; and, being reflected, is carry'd back over the Shoulder, to cross the other again upon the Breast. Thus is the Roller spent in carrying one of its Heads round the Body, while the other Head is taken in by it, and reflected from the Breast to the Back, and from thence back again, at every mutual Concurrence of the Heads; by which means the Splints, with the subjacent Bolsters, are firmly covered, and secured upon the fractured Bone. In the last Place, the Ends of the Roller are to be well fasten'd with Pins, and the Arm to be suspended in a Sling, as in *Tab. 59. Fig. 17. C. C.* But, since it is very difficult to retain the Parts of the broken Clavicle, after they are reduced, in their proper Situation, by this Bandage alone, because they are very subject to be drawn out of their Place by the Weight of the Arm, the Surgeon would do well to assist it with another Bandage, termed, from its Figure, the *Stellate*, which draws back, and in a manner suspends, the Shoulders. The Application of it is as follows:

II. Take a single-headed Roller, four or five Ells long, and three Fingers broad, and apply the End of it upon a Bolster under the Axilla of the sound Side (*Tab. 58. Fig. 24. a.*); whence carry it obliquely up the Back, between the Scapulæ, to the Top of the Shoulder next the Fracture, *b.* from whence descending before, let it pass under the diseased Axilla, *c.* and from thence return obliquely up the Back, and over the Shoulder, to the sound Axilla, where it began; so that the Courses, by their Intersections, *e.* form the Figure of an X in the Middle of the Back. These Circumvolutions are to be continued till the Roller is spent, when the Bandage fixed on the Shoulders will represent the Figure ( $\infty$ ), that is, of two Rings cohering by vertical Angles, or opposite and continued Vertices; and the Shoulder next the Fracture will be firmly retained in a backward Posture, by which a Dislocation of the reduced Fragments will be prevented. If this Bandage, after some time, becomes slacker, as it usually happens, it may be necessary, after every two or three Days, to renew the same, the Arm being held back by an able Assistant, while it is off; and, at other times,



the Patient must constantly keep his Arm in a Sling. See *Tab. 59. Fig. 17.* And this is the Bandage call'd *Stellate*, from some sort of Resemblance it shews on the Back to a Star. It may also begin by applying the End of the Roller upon the Shoulder, *d.* and thence carrying it by *e.* and *c.* to *b.* and from thence by *e.* and *a.* to *d.* again, and so on till it is spent. Observe, lastly, that, instead of this Bandage, the Machine recommended above, and represented *Tab. 29. Fig. 13.* may commodiously be used.

III. When the Clavicle is fractured near the Humerus, the most proper and commodious Species of Bandage is that call'd the *Spica Simplex*, so denominated from its supposed Resemblance to an Ear of Grain. It has also gone under the Name of *Geranium*, among Physicians, ever since the Days of *Hippocrates*. It consists of a common or simple Roller, about five Ells long, and three Fingers Breadth, rolled up into one Head. The Fragments being rightly reduced, and secured as before directed, the End of the Roller is apply'd under the sound Axilla upon a Bolster, and an Assistant ordered to hold it on the Place. See *Tab. 58. Fig. 25. a.* From hence the Roller is carry'd obliquely over the Breast, *b.* and the broken Clavicle, *c.* and thence descends behind over the Top of the Scapula; and, passing under the diseased Axilla, is reflected from its interior Part, *d.* to its posterior Part, in such a manner as to pass over the former Course, *e.* making with it the Figure X over the Axilla; whence it descends obliquely over the Back to the opposite Axilla, *a.* where it began. When the Roller is thrice passed about the Patient in this manner, the remaining Part of it may be disposed of either in the same Course, or in a circular Direction about the Humerus, adjacent to the affected Clavicle; and the End of it is to be secured either by a Pin, or by Suture. The Patient's Arm is also to be suspended in a Sling, lest by its Weight the reduced Bone should be removed from its Situation. The Surgeon, in the mean time, is to be particularly careful, that the Bandage be exactly applied to the fractured Part, and retain it in its due Position. The Patient must also keep his Arm as easy as possible; for which Purpose some fasten it to the Breast by a circular or spiral Bandage.

Others apply the Bandage for this Purpose, by beginning under the Axilla of the sound Side, as in *Fig. 25.* from whence they proceed obliquely across the Back, and over the Shoulder adjacent to the fractured Clavicle, *c.* which is also to be comprehended by the Bandage: And, having passed the Roller under the Axilla, *d.* it is carry'd over the Shoulder; and, intersecting the former on the Fracture, *e.* it goes obliquely across the Breast, *b.* to the opposite Axilla, *a.* where it began; and thus they continue till the Roller is spent, fastening its End about the Shoulder, or where-ever it terminates. The Usefulness of these Bandages; in a Fracture or Luxation of the Clavicle, is self-evident. It may be also apply'd with Advantage in a Luxation of the Humerus, and even in a Fracture of its Neck.

IV. The simple *Spica* with two Heads is a Bandage made with the same or a somewhat longer Roller, rolled up into two Heads in manner following: The Middle of the Roller is fix'd under the sound Axilla, (*Fig. 25. a.*) whence its anterior Head passes over the Precordia, *b.* and its posterior over the Back obliquely to the affected Shoulder, *c.* where the Heads changing, descend one behind, the other before, to the Axilla, *d.* under which they again change, and are carry'd up to the Top of the Shoulder, *e.* where they cross again, and descend obliquely, one over the Breast, the other over the Back, to the Right or sound Axilla, *a.* under which again crossing, they continue the same Course as before, till the Roller is run out, and the Clavicle well cover'd and secur'd. After this the Arm is to be suspended in a Sling, and the same Cautions are to be observ'd as before.

Another Method of applying the double-head *Spica* is as follows: The Middle of the Roller is fixed under the Axilla of the Side affected, *Fig. 25. d.* whence both Heads are carry'd up to the Top of the Shoulder, *e.* where crossing, they must be drawn tight, and carry'd obliquely over the Breast, *b.* and the Back to the Right Axilla, *a.* where again crossing and changing, they return by the same Way to the Top of the Shoulder, *e. e.* and there crossing, and being duly strain'd, they are carried down under the Left Axilla, *d.* where the Bandage first began. And thus the same Course is to be repeated, till the Roller is run out, and the affected Part well cover'd and secur'd. Some modern Surgeons, following *Galen* and the Antients, apply a Part of this Bandage, in manner of a Sling or Bridle, about the lower Arm, in order to sustain it; but as, by that means, the fractured Clavicle will be drawn downwards by its sustaining the Weight of the Arm, I should rather approve of a particular Sling, such as is represented *Fig. 17. Tab. 59.* to be fasten'd about the Neck and the sound Shoulder.

Monf. Gouey, a French Surgeon, in his *Chirurgie veritable*, has directed a Bandage different from the preceding, but equally neat and commodious, and perhaps preferable, as being applicable to all kinds of Fractures of the Clavicle. In this Method, which is a particular Application of the *Capitalis reflexa*, or *Capeline*, he uses a Roller, six Ells long, and two Fingers broad, which is also rolled up with two Heads, in the following Man-

ner: The Middle of the Roller is fixed under the Axilla nearest to the affected Clavicle, (see again *Fig. 25. Let. d.*) and the two Heads of the Roller carry'd up to the Top of the Shoulder; where they cross in the Figure of an X, and are thence brought down, one over the Breast, *b.* the other over the Back, to the opposite Axilla, *a.* under which they cross; and thence being carry'd in a Circle round the Body, meet again under the Axilla next to the Fracture; and there crossing, are again carry'd up to the Top of the Shoulder, and their Course continued as before, till they return to where they began; the posterior Head is then brought forward over the Shoulder down to the Breast, and is there taken in by the anterior Head, (see *Fig. 23. a. b.*) which is carry'd circularly round the Body; and having thus passed under it, is reflected back in the Direction *f.* and again taken in by the circular Turn on the Back; whence it is again reflected, and taken in by the Circle at the Breast; and thus the Heads continue their Course, till the Roller is spent. That we may know the Reason, which moved the Author of this Bandage to prefer it before all others, it will be proper to shew its Usefulness, according to the Description of the Inventor. While, then, the Beginning of this Bandage slightly compresses the Axilla next the diseased Part, the broken Clavicle, which was drawn downwards from its Situation by the Weight of the Arm, is reduced or forced into its Place. And again, as soon as the Roller, after crossing upon the Shoulder, is carry'd obliquely over the Breast, and the diseased Place, to the opposite Axilla, the Fragment of the Clavicle near the Sternum, which is always raised upwards by the Fracture, is most commodiously depressed into its proper Situation, so that, after two Circles only of the Roller, the broken Parts of the Clavicle will be reduced to their natural Position. M. Gouey also judges this Bandage better than the common Sort for a Fracture of the Scapula.

The Bandage for a Luxation of the Clavicle is almost the same as for a Fracture of it, the Injury in these Cases being much of the same Nature. As soon, therefore, as the Luxation is reduced, a Bolster, dipt in Spirit of Wine, is to be apply'd to the Part; and, if the Dislocation be of that End next the Sternum, the *Capeline* Bandage, before described, is to be used; but if the Clavicle be depressed inwards, it will be also necessary to apply the *Stellate* Bandage, described above, in order to keep the Shoulders extended backwards, that the Clavicle may be thrown outwards; but, when this Bone is dislocated outwards, this Bandage must be omitted; and we must endeavour to depress it by Application of thick Bolsters. If the Head of the Clavicle, next the Scapula, be dislocated, your Bandage must be the simple *Spica* with two Heads, or that of M. Gouey, before described. Lastly, when both the Clavicles are violently displaced, the double *Spica* is to be applied in the Manner directed for Luxations of the HUMERUS and SCAPULÆ, which see. In all Fractures and Luxations of this kind, the Patient is to carry his Arm in a Sling, fastened at his Neck, till the Parts are sufficiently confirmed, to prevent a new Dislocation. *Heister, Chirurg.*

CLAVICULÆ, in Botany, is the same as *Capreoli*. See CAPREOLUS.

CLAVIS *Siliginis*. *Lonicus* calls by this Name the Grains of Rye, which are spoiled in the Growth, and look black. I think the Country People call it *Smutted Rye*. It is esteemed an excellent Remedy against an immoderate Flux of the *Lochia*.

CLAVIS, in Anatomy, is the same as CLAVICULA.

CLAVIS, in Chymistry, is any Menstruum, particularly of Minerals, which unlocks them, as it were, and penetrates to their inner Substance: Or it imports Directions for performing any secret Process.

CLAUSTRUM *Gutturis*, κλειθρον, κλειθερον. The Passage to the Throat, which lies immediately under the Root of the Tongue and Tonsils. *Clastrum Virginitatis* is the Hymen.

CLAUSURA. An Imperforation of any Canal or Cavity in the Body. Thus *Clausura Uteri* is a preternatural Imperforation of the Uterus. And *Clausura Tuborum Fallopianarum* is a morbid Imperforation of the Fallopian Tubes, mention'd by *Ruyssch* as one Cause of Infecundity.

CLAVUS is a Chirurgical Instrument of Gold, with a large Head, mentioned by *Amatus Lusitanus*, which was designed to be introduced into an exulcerated Palate, for the better Articulation of the Voice. *Forestus* takes notice of one made of Silver.

CLAVUS *Hystericus* is an hysterical Symptom, which *Sydenham* thus describes:

Hysterics sometimes attack the external Part of the Head, between the Pericranium and the Cranium, and occasion violent Pain, which continues fix'd in one Place, not exceeding the Breadth of the Thumb; and it is likewise accompany'd with enormous Vomiting. I call this Species the *Clavus hystericus*, which principally affects such as have the Green Sicknels. *Sydenham*. See HYSTERICA.

Such a Pain in the Head also sometimes arises from a Venereal Caries or Exostosis of some Bone of the Cranium. *Astruc*.



**CLAVUS Oculorum**, according to *Celsus*, *Lib. 7. Cap. 7.* is a callous Tubercle on the White of the Eye, taking its Denomination from its Figure. This, he says, it is proper to perforate with a Needle to the Bottom of its Root, to cut it out, and then to dress it with lenient Medicines.

**CLAVUS** also sometimes imports indurated Tubercles of the Uterus.

**CLAVUS** is also a Corn on the Foot. Very frequently hard and preternatural Tubercles, not unlike smooth Warts, are form'd on the Extremities of the Feet, and more especially between the Toes. These Tubercles, whatever their Form and Shape may be, are called by the common Name of *Clavi*. The principal and most general Cause of this Misfortune is by Physicians justly ascribed to narrow Shoes; for Persons who, from a Principle of Vanity, or some other mistaken Notion, wear Shoes of this kind, are not only more subject to this Disorder, but also more tormented by it, than others, especially when the Weather is excessively hot, or when they are reduced to a Necessity of standing long, or walking far. Tho' various Medicines, both of the emollient and corrosive Kind, are by different Physicians prescribed for the Extirpation of Corns, yet the most natural and effectual Way of going to work is, first, to soften them, when they are preternaturally hard. This Intention is most effectually answered by frequently washing the Feet, after which the upper and harder Part of the Corns are to be carefully and cautiously pared off with a Knife; for, by this means the Pain, with which this Disorder is accompany'd, is often removed: But if it should not yield to these Measures, a Plaister of green Wax, or of Gum-ammoniac, or the Mucilage-plaister, or one prepared of sliced Soap, or a Leaf of the *Sedum Majus*, or greater Housleek, is to be apply'd to the Corn, after paring it, and to be renew'd daily. After these Measures have been diligently persisted in for some time, the Corn may, without much Trouble, be either scratched off with the Nail of the Finger, cut out with a Knife, or, which is still more proper, cautiously abraded. But the Knife is in this Case cautiously to be used, lest, by an unskilful Application of it to the Toes, the Tendon of the Extensor Muscle should be wounded; by which means the Patient is often subjected to violent Pains, Inflammations, Gangrenes, Convulsions, and sometimes to an immediate Danger of losing his Life; Instances of which are related by *Hildanus*, and other practical Authors.

Tho', for the most part, Corns are not entirely extirpated by Paring, but generally appear afresh after some time, yet they are sometimes removed by this Method, or, at least, the Pain and Trouble accompanying them are alleviated, especially if, at the same time, sufficiently large Shoes are wore; if the Method already directed is used every Month, or repeated as often as the Pain and other Symptoms require; and if some of the before-mention'd Remedies, after abrading the external Parts of the Corn, are apply'd fresh every twenty-four Hours. By this Method the Corns are either gradually entirely mortify'd, or, at least, grow more slowly, and become tolerable. *Heister's Surgery*.

After Corns are cut away, *Harris* says the Diachylon simplex will prevent them from growing again; as will also the *Galbanum Coctum Mynsichti*; and also, that soft Wax which is used by the Lawyers. But, above all, a clean Linen Rag bound about the Toe, after the Callus is cut away. This was much recommended by King *Charles* the Second. *Harris's Differt.*

The Pulp of Lemon laid to a Corn, and bound on all Night, softens it by the Morning, so that it may easily be taken off.

**CLEIDION**, κλειδίων. An Epithet of a Passil describ'd by *Galen*, in his *Treatise de Compositione Medicam. S. L. 9. C. 5.* and by *Paulus Aegineta*, *L. 7. C. 12.* It is also the Name of an Epithem, describ'd by *Actius*. They are all of the restraining Kind, and take their Names from κλειω, to shut. It sometimes imports the same as *Clavicula*.

**CLEIS**, κλεις. The same as *CLAVIS*.

**CLEISAGRA**, from κλεις, the Clavicle, and ἀγρα, a Prey. The Gout in the Articulation of the Clavicles to the Sternum. *Paré*.

**CLEITHRON**, κλειθρον. The same as *CLAUSTRUM*, which see.

**CLEMA**, κλήμα. A Twig or Tendril of a Plant. The same as *Sarmentum*. Hence,

**CLEMATIS**. A Name for the *Vinca Peruviana*. See *PERUVINCA*. Hence, also,

**CLEMATITIS**. A sort of Plant so call'd, because it climbs up Trees with Claspers or Tendrils, like those of Vines.

The Characters are,

The Root is fibrous and perennial; the Leaves conjugated; the Flower is naked, tetrapetalous, seldom pentapetalous, disposed somewhat in the Form of a Cross; the Stamina are many in Number, villous, set thick together, and arising from the lowest Part of the Margin of the Base of the Ovary; the Apex

of the Peduncle becomes a Placenta, round which grow many Ova, furnish'd with a long plumous Tube.

*Boerhaave* mentions twelve Species of this Plant.

1. *Clematitis*; five *Flammula surrecta*; alba. *J. B. 2. 127. Raii Hist. 1. 621. Tourn. Inst. 294. Elem. Bot. 244. Boerb. Ind. A. 46. Hist. Oxon. 3. 316. Chab. 117. Flammula Jovis; Offic. Flammula Jovis surrecta, Ger. 741. Emac. 888. Park. Theat. 382. Parad. 393. Flammula recta; C. B. Pin. 300. Flammula surrecta, Rupp. Flor. Jen. 34. Buxb. 114. UPRIGHT LADIES BOWER.*

This flowers in Summer. The Herb, with the Flower, is used, and are of a caustic burning Quality. *Dale*.

The Flowers, Seed, Bark, and Root, have a caustic Virtue: This Species, rub'd with the Fingers, and then held to the Nostrils, strikes them, like Lightning, in an Instant with a most strong and vehement Smell. It yields a Water as hot as Spirit of Wine; and is found to be very effectual, as *Matthiolus* tells us, in the coldest Diseases; but, doubtless, it cannot be taken inwardly with Safety, unless it be well mix'd and temper'd with other Waters, to prevent its injuring the Viscera.

Some commend the Oil for the Pain of the Sciatica, Joints, and Iliac, for Difficulty of Urine, and the Stone in the Kidneys, to be rub'd on the Parts hot, or infused in Clysters. This Oil is thus prepared:

They take the Leaves of the *Flammula*, cut very small, and put them into a Glass Vessel in Oil of Roses; then expose the Vessel, well stopp'd, to the Sun during the Summer. It is taken also in Food, for these Distempers, to the Weight of three Drams. *Raii Hist. Plant.*

2. *Clematitis*; sylvestris; latifolia. *C. B. P. 300.* See *ATRAGENE*.

3. *Clematitis*; peregrina; foliis pyri incis. *C. B. P. 300.* SPANISH CLIMBER, OR TRAVELLERS JOY, WITH CUT LEAVES.

4. *Clematitis*; Canadensis; trifolia; dentata; flore alba: *H. R. Par. 1. H. subm.* THREE-LEAVED CANADA CLIMBER, WITH A WHITE FLOWER.

5. *Clematitis*; cœrulea; erecta. *C. B. P. 300. M. H. 3. 616.* UPRIGHT BLUE CLIMBER.

6. *Clematitis*; cœrulea; vel purpurea; repens. *C. B. Pin. 300. Tourn. Inst. 294. Elem. Bot. 244. Boerb. Ind. A. 46. Clematis altera, Offic. Clematis peregrina cœrulea five rubra, Ger. 740. Emac. 887. Raii Hist. 1. 622. Clematis peregrina flore rubro vel purpureo simplex, Park. Theat. 381. Parad. 392. Clematis five Flammula flore purpureo & cœruleo scandens. J. B. 2. 128. Chab. 117. Clematis flore simplici, Rupp. Flor. Jen. 54. VIRGINS BOWER. *Dale*.*

This is thought to be the *Clematis* of *Dioscorides*, who informs us, that the Seeds, taken in Water or Hydromel, purge Phlegm and Bile; and that the Leaves, applied to the Part affected, cure a Leprosy. The Moderns have added nothing to these Virtues.

7. *Clematis*; repens; rubra. RED CREEPING CLIMBER.

8. *Clematis*; Orientalis; folio Apii; flore ex viridi flavescens, postea reflexo. *T. Ger. 20. 1. subm.* EASTERN CLIMBER, WITH A SMALLAGE-LEAF, AND A REFLEX'D FLOWER OF A GREENISH YELLOW.

9. *Clematis*; cœrulea; flore pleno. *C. B. P. 301.* BLUE CLIMBER, WITH A DOUBLE FLOWER, OR DOUBLE VIRGINS BOWER, *vulg.*

10. *Clematis*; Alpina; geraniifolia. *C. B. P. 300. Prodr. 135. M. H. 3. 616.*

11. *Clematis*; Hispanica; surrecta; altera; & humilior; flore albicante. *H. R. Par. H. subm.* LOW SPANISH CLIMBER, WITH A WHITISH FLOWER.

12. *Clematis*; erecta; folio fraxini.

The second Sort is found wild in most Parts of *England*, and grows upon the Sides of Banks, under Hedges, and extends its trailing Branches over the Trees and Shrubs, which are near it. *Miller's Dictionary*.

**CLEONIS Collyrium**. The Name of a Collyrium, describ'd by *Celsus*, *Lib. 6. C. 6.* The *Cleonis Gluten*, mention'd by *Oribasius*, *L. 4.* and recommended for restraining Fluxions, consists of Terra Samia, Myrrh, and Grains of Frankincense, each equal Parts, mix'd with the White of an Egg: It is to be spread on Linen Cloth, and applied to the Temples and Forehead.

**CLEOPHANTUS**. An antient Physician quoted by *Celsus*, who, according to this Author, *L. 3. C. 14.* cured Tertians by pouring a great Quantity of Water on the Patient's Head, before the Accession of the Paroxysm, and then exhibiting Wine. This Method *Celsus* disapproves.

**CLEPSYDRA**, κλεψύδρα, from κλεπτω, to conceal, and ὕδωρ, Water. Properly an Instrument to measure Time, by the Dropping of Water from one Vessel, perforated with a small Hole,



Hole, into another Vessel. But it is used to express a chymical Vessel perforated in the same manner. *Clepsydra* is also an Instrument mention'd by *Paracelsus*, contriv'd to convey Sulfumigations to the Uterus.

**CLIBANUS**, κλίβανος. A little portable Oven, made either of Earth, Iron, Copper, or any other convenient Materials. See **ARTQS.**

**CLIDION**. The same as **CLEIDION**, which see.

**CLIMA**, κλίμα. A Climate. It is very necessary for a Physician to be well acquainted with the Differences of Climates, not only because they produce Variety of Distempers, but also because they require the Methods of Cure, and Regimen, to be varied. *Paracelsus*.

**CLIMACION**, κλιμάκιον, or κλιμάκειον. The Round of a Ladder. It is mention'd in the Treatise of *Hippocrates de Arte*, when speaking of reducing a luxated Shoulder.

**CLIMACTER**, κλιμακτήρ. It imports the same as *Climacium*, that is, the Scale or Round of a Ladder. Hence,

**CLIMACTERICUS Annus**. A climacteric Year. According to some, every seventh Year is a Climacteric; but others only allow those Years produced by multiplying seven by the odd Numbers 3. 5. 7. and 9. to be climacterical. These Years, they say, bring with them some remarkable Change, with respect to Health, Life, or Fortune. The grand Climacteric is the sixty-third Year; some, making two, add to this the Eighty-first. The other remarkable Climacterics are the Seventh, Twenty-first, Forty-ninth, and Fifty-sixth. I believe the Credit of climacteric Years can only be supported by the Doctrine of Numbers introduced by *Pythagoras*; tho' many great Men, both among the Antients and Moderns, appear to have had great Faith in it.

**CLIMIA**. A Name for the *Cadmia Fornacum*. *Climia Ereps Rulandus* explains by *Cadmia Auripigmenti*.

**CLINERES**, κλινήρες. The same as **CLINOPETES**, which see.

**CLINICUS**, κλινικός, from κλίνει, a Bed. Clinical. A Clinical Physician is one who visits Patients confin'd to their Beds. Hence Clinical Medicine, of which *Hippocrates* is said to have been the Author. *Clinicus* is also applied to a Patient who keeps his Bed.

**CLINOIDES**. The four small Processes of the Os Sphenoides, which form the *Sella Turcica*. *Castellus*.

**CLINOPETES**, κλινωπετής. A Person who, on account of great Weakness, or any Distemper, is obliged to lie in Bed, or on the Bed.

**CLINOPODIUM**. A Plant thus call'd.

The Characters are,

The Calyx is long, tubulous, quinquefid, rough, and closely compacted; the Galea is roundish, erect, bifid, and furnish'd with a tripartite Beard; the Flowers grow in thick Whorls, closely set round the Stalk.

*Boerhaave* takes notice of nine Species of this Plant.

1. *Clinopodium*; *Origano simile*; *elatius*; *majoris folio*. *C. B. Pin.* 224. *Cat. Monsp.* 71. *Hist. Oxon.* 3. 374. *Tourn. Inst.* 195. *Elem. Bot.* 163. *Boerb. Ind. A.* 158. *Rupp. Flor. Jen.* 188. *Buxb.* 75. *Clinopodium*, *Offic.* *Dill. Cat. Giss.* 132. *Rivin. Irr. Mon.* *Clinopodium majus*, *Rau Hist.* 1. 558. *Phyt. Brit.* 28. *Clinopodium vulgare*, *Merc. Bot.* 1. 29. *Clinopodium quorundam Origani facie*, *J. B.* 3. 250. *Clinopodium*, *Acinos*, *Ger.* 548. *Ermac.* 675. *Mer. Pin.* *Acinos sive Clinopodium majus*, *Park. Theat.* 22. **GREAT WILD BASIL.** *Dale.*

It grows frequently in Hedges. The Herb, and the Decoction thereof, is taken as an Antidote against the Bites of venomous Animals, and as a Remedy for Spasms, Contusions, and Stranguries. It facilitates Delivery, provokes the Menses, and cures pentile Warts, call'd *Acrochordones*, if taken for some Days. It stops a Diarrhoea, boil'd to the Consumption of one Third, and then drank. It must be boil'd in Wine, in case of a Fever; but Water, if there is no Fever. *Dioscorides*.

2. *Clinopodium*; *Alpinum*; *roseum*; *saturejæ foliis*. *Bocc. Mus.* p. 119. a. **ALPINE FIELD BASIL, WITH LEAVES LIKE SAVORY.**

3. *Clinopodium*; *angustifolium*; *minus*; *Pulegii odore*; *Romanum*. *Bocc. Mus.* p. T. 45. a.

4. *Clinopodium*; *Orientalis*; *hirsutum*; *foliis inferioribus Oxyum, superioribus Hyslopum, referentibus*. *T. Cor.* 12. a.

5. *Clinopodium*; *Canadense*; *fistulosum*; *foliis dilutè virentibus & hirsutis*. *Flor.* 2. 69. *Origanum, fistulosum, Canadense*, *Cornut.* 14. *Leonurus, Canadensis, Origani folio*. *T.* 187.

6. *Clinopodium*; *Canadense*; *fistulosum*; *foliis saturatius virentibus & hirsutis*. *Flor.* 2. 69.

7. *Clinopodium*; *Orientalis*; *humile*; *verticillis florum singularibus & crassioribus*. *T. Cor.* 12. a.

8. *Clinopodium fistulosum*; *pumilum*; *Indiæ Occidentalis*; *summo caulo floridum*. *Plukn.* a.

9. *Clinopodium*; *spicatum*; & *verticillatum*; *Lusitanicum*. *T.* 195. *Bigula, odorata, Lusitanica*. *Corn.* 46. a.

*Boerhaave's Index alter Plantarum, Vol. 1.*

**CLISSUS**, in *Paracelsus*, is a certain Virtue, or occult Vicissitude of Things, which goes and returns to the Place from whence it departed. Thus the Flowers of all Vegetables grow flaccid in the Evening, but revive, and are expanded, in the Morning, by virtue of this *Clissus*.

It imports also the same as **CLYSSUS**, which see.

**CLISTUS**. The same as **CLYSSUS**, which see.

**CLITORIS**, or as it is call'd *Oestrum Veneris*, is a Part of the external Pudenda, situated at the Angle which the Nymphæ form with each other. See the Explication of the Letters a. b. b. c. c. d. and e. in *Tab.* 16. *Fig.* 7. and 9. in *Fig.* 3. of *Tab.* 17. and the Figures.

The Clitoris appears, at first Sight, like a small imperforated Glans. Its upper and lateral Sides are cover'd by a kind of Prepuce, form'd by a particular Fold of a Portion of the inner Side of the Nymphæ, which appears to be glandular, and to discharge a certain Moisture, and its Inside is granulated.

By Dissection, we discover in the Clitoris a Trunk, and two Branches, as in the Penis, made up of a spongy Substance, and of very elastic Coats, but without any Urethra. This Substance may be inflated either by Air, or by anatomical Injections into the Artery. The Trunk is divided into two lateral Parts by a middle Septum, from the Bifurcation to the Glans, where it is insensibly lost.

The Bifurcation of the Trunk is on the Edge of the cartilaginous Arch of the Os Pubis; and the Branches, which resemble the Roots of the Corpora Cavernosa, are inserted in the inferior Branches of these Bones, and in those of the Os Ichiū, where they terminate by degrees; but there is sometimes a membranous Tube on each Side, which reaches to the Tuberosity of the Ichiū.

The Trunk of the Clitoris is sustain'd by a suspensary Ligament, fix'd in the Symphysis of the Os Pubis, and containing this Trunk in its Duplication, nearly as in the other Sex.

Four Muscles, or Fasciculi of fleshy Fibres, are inserted in the Trunk of the Clitoris, two on each Side. One of them runs down on the fore Side of the neighbouring Corpus Cavernosum, and is inserted by a tendinous or aponeurotic Portion, partly in the Extremity of the Corpus Cavernosum, and partly in the Tuberosity of the Ichiū. These two Muscles are call'd *Erectores*; but the Name of *Ichiocavernosi* would be more proper.

The other Muscle on each Side lies under the former, and runs down on the Side of the Urethra, and great Orifice of the Uterus, all the Way to the Anus; increasing gradually in Breadth in its Passage, and terminating partly like that which is call'd *Accelerator* in Males.

These two Muscles surround, very closely, the lateral Parts of the Urethra, and of the great Orifice. They expand very much as they descend, and are spread in the lower and lateral Parts of the great Orifice; for which Reason several Anatomists have look'd upon them as muscular Sphincters. All these four Muscles, and especially the two latter, are oftentimes almost cover'd with Fat.

The Blood-vessels of the Clitoris come principally from the Hypogastricæ, and the Nerves from the second and third Pairs of the Nervi Sacri, by means of which they communicate with the inferior Mesenteric Plexus, and with the great Sympathetics. *Winslow's Anatomy*.

The Clitoris has, like the Penis, an Erection; and is esteem'd to be the principal Seat of Venereal Pleasure.

*Extirpation of Part of the CLITORIS, when too large.*

The Clitoris is in some so shamefully large as to protuberate without the Lips of the Pudenda; in which Case it is by the Attrition of the Clothes erected, and powerfully stimulated to Venerary: For this Reason the *Egyptians* judg'd it expedient to amputate a sufficient Part of it, before it assum'd such an enormous Size, at that time especially when Virgins were to enter into a married State. Their Method of performing this Operation is as follows: The Virgin, who was to have her *Clitoris* curtail'd, is placed in a proper Seat, with a robust Fellow behind her, who, with his Arms, is to secure her Legs, and the Whole of her Body, in a Posture proper for the Operation. Then the Surgeon, standing before the Patient, is, with a pretty large Forceps in his Left Hand, to lay hold of the Clitoris, and extend it in a due Degree: After this he is, with his Right Hand, to cut it off near the Teeth of the Forceps. But, as in the Excision of the Columella, he is to take particular Care not to extirpate it totally, but only to cut off its superfluous Parts; for, in consequence of its being furnish'd with several Pellicles, it is capable of being much extended; by which means the Surgeon is in Danger of performing the Amputation beyond the proper Part, and this Error is follow'd by an involuntary Discharge



charge of the Urine. When the Operation is thus perform'd; the Wound is to be cleansed with a Sponge, squeez'd out of astringent Wine, or cold Water. Then the Part affected is to be sprinkled with Powder of Frankincense. After this a Linen Cloth, dipt in Oxycrate, is to be applied to it; and a Sponge, squeez'd out of the same Liquor, secured over all. But, after the seventh Day, the Parts are to be sprinkled with Cadmia, finely triturated, either by itself, or with Rose-leaves, or with a dry Preparation of the *Phrygian Stone*, recommended for Fissures of the Pudenda, or with the Ashes of Date-stone. *Aetii Tetrabib. 4. Serm. 4. C. 103.*

An Operation, somewhat analogous to this, is perform'd for that Species of Disorder by the *Greeks* call'd *κέρκωσις*, by the *Latins* *Cauda*, and which, by *Aetius*, in the above cited Part, is describ'd in the following manner: In some Women, says he, a certain fleshy Substance arises from the Mouth of the Uterus, and fills the Vagina. Sometimes it also protuberates without the Lips of the Pudenda, like the Tail of some Animal, from which Circumstance it has received the Denomination of *Cauda*. The Patient is, in this Case, to be situated in the manner directed for the Amputation of the Clitoris; and the protuberating Caruncle is to be extended with a Forceps, and totally extirpated. After the Operation is perform'd, the Dressings, and other Measures of Cure, are the same as in the Amputation of the Clitoris. *Ib. 104.*

In some Women the Clitoris is so preternaturally large, as to prove a monstrous Deformity. In this Case, the Patients are to be laid in a supine Posture, and the superfluous Parts of the Clitoris, being laid hold of with a proper Forceps, are to be extirpated with the Knife; but, in performing this Operation, the Surgeon must take particular Care not to make the Incision too deep, lest an involuntary Discharge of Urine should be brought on. The Cauda (*κέρκωσις*) also, which is a fleshy Body arising from the Mouth of the Uterus, and filling the Vagina, sometimes protuberates without the Lips of the Pudenda; in which Case its superfluous Parts are, as well as the Clitoris, to be extirpated with the Knife. *Paulus Aegineta de Re Medica, Lib. 6.*

The Clitoris, in some Women, is of so extraordinary a Size, as to resemble a Penis, and procure its Subjects the Name of Hermaphrodites\*, though it be destitute of any Perforation or Duét for the Emission of Semen or Urine. As the enormous Bigness of this Part is a great Incumbrance to the conjugal Office, the Assistance of the Surgeon is sometimes desired to remedy the Nuisance. Among the *Arabians* and *Egyptians*, this Disorder is said to have been very frequent; so that it was a common Practice with them to cut off from the new-born Girls whatever was indecently prominent in that Part. Such an Operation indeed is rarely performed among *Europeans*, because the Subjects of this Disorder are studious to conceal it, either through Modesty, or Dread of the Knife. But, that the Surgeon may not be at a Loss how to proceed, if such a Case should happen, we shall direct him to two Methods of Cure: The first is to make a Ligature upon the Part, and so take off all Superfluities or Excrescences, in the same manner as is done in Tubercles, or removing a mortified Part of the Penis. The second Method is to cut off the indecent Part with an Incision-knife, and, after it has bled sufficiently, to stop the Hæmorrhage with Styptics and a Bandage, performing the Cure as in other Wounds. *Bellonius* relates, that the *Indians* reduce the excessive Length of this Part in their Women, by applying an actual Caustery. *Heister, Chirurg. p. 1025.*

CLITORIDIS *Flos Ternatensis*. Breyni. A beautiful Flower, which grows in the Island *Ternate*, which the Inhabitants boil and eat. But I do not find any particular Virtues ascribed to it.

CLOACA signifies strictly a Jakes, a Word which relates to Physic, only as it is a necessary Appendage to most medicinal Springs, which are, in any Degree, resorted to; for this Reason, I presume, *Dr. Short*, in his Account of *Harrigate Spaw*, has been particularly careful to specify at what Point of the Compass the Necessary-house at that Place lies from the Spring. A necessary Instruction for Strangers, who are studious of Cleanliness!

But CLOACA, in comparative Anatomy, imports the Canal in Birds, through which the Egg descends from the Ovary in its Exit. In this it is remarkable, that the Part, which is next the Ovary, is jagged, like the *Morsus Diaboli*, and fluctuates in the Abdomen, without any Attachment to the Ovary; hence Anatomists have been somewhat puzzled to comprehend, by what Means the Egg falls into the Ovary.

CLONODES, *κλονῶδες*. An Epithet for a sort of Pulse, which is vehement, large, and at the same time unequal in one and the same Stroke. *Castellus.*

CLONOS, *κλονος*. Any tumultuary and inordinate Motion. It is applied to any epileptic, convulsive Motions.

CLUNES. The Buttocks. They consist of the Skin, Fat, and Muscles, principally those called *Glutæi*.

CLUPEA. A Fish called the Shad. See *ALOSA*.

CLUTIA.

The Characters are,

It hath a rose-shaped Flower, consisting of five Leaves. In the Centre arises the Pointal, surrounded by five Stamens. This Pointal afterwards becomes the Fruit, which is divided into three Parts, and hath three Cells, in which are contained Seeds. *Miller's Dictionary, Vol. 2.*

*Boerhaave* mentions but one Species of this Plant, which is, Clutia. *Frutex Æthiopica, Portulacæ folio, flore ex albido virecente, H. A. 1. 177.* SHRUBBY ETHIOPIAN CLUTIA, WITH A PURSLANE-LEAF, AND A GREENISH-WHITE FLOWER. *Boerhaave's Index alter Plantarum, Vol. 2. p. 260.*

CLYDON, *κλύδων*. It imports a Fluctuation and Flatulency in the Stomach and Intestines.

CLYMA. The Faces of Silver and Gold. *Castellus.*

CLYMENOS DIOSCORIDIS is the *Scorpioides folio Bupleuri*. *Boerhaave's Ind. alt. Vol. 2. p. 52.*

CLYMENUM, Chickling-vetch.

The Characters are,

The Stalks, Flowers, and Fruit, of this Plant are like those of Lathyrus; but the Leaves consist of many Conjugations placed on a Mid-rib, which ends in a Tendril. *Miller's Dictionary, Vol. 1.*

*Boerhaave* mentions four Species of this Plant, which are,

1. Clymenum; Hispanicum; flore vario; siliquâ planâ. *T. 396. Lathyrus, vicioides, vexillo rubro, petalis rostrum ambientibus cæruleis. M. H. 2. 50. Lathyrus, viscosi nomine missus. Ind. 159. a.* SPANISH CHICKLING-VETCH, WITH A VARIABLE FLOWER, AND A PLAIN POD.

2. Clymenum; Hispanicum; flore vario; siliquâ articulata. *T. 396. Lathyrus vicioides, floris vexillo phæniceo, foliis labialibus, subalbescens; siliquis Ochri. M. H. 2. 55. a.* SPANISH CHICKLING-VETCH, WITH A VARIABLE FLOWER, AND A JOINTED POD.

3. Clymenum; Bithynicum; siliquâ singulari; flore minore. *Jussieu. a.* BITHYNIAN CHICKLING-VETCH, WITH A SINGLE POD, AND SMALLER FLOWER.

4. Clymenum; vexillo obsolete cæruleo, petalis pallidis. *An Clymenum, Parisiense, flore cæruleo? T. 396. a.* COMMON CHICKLING-VETCH, WITH A BLUE FLOWER. *Boerhaave's Index alter Plantarum.*

To these *Miller* adds a fifth, which is the

Clymenum; Græcum, flore maximo singulari. *T. Cor.* GREEK CHICKLING-VETCH, WITH A LARGE SINGLE FLOWER.

CLYPEALIS CARTILAGO. The Thyroide Cartilage.

CLYPEUS. This seems to have been a sort of Register belonging to the Baths of the Antients, so called from its Form. The Use of it was, to increase or diminish the Heat, by excluding or letting in the Air.

CLYSMA, *κλύσμα*. A Clyster. See *ENEMA*.

CLYSSIFORMIS *Destillatio*. A Destillation of such Substances as are subject to take Fire, and fulminate, by a tubulated Retort. *Castellus* from *Wedelius*.

CLYSSUS.

Among the ancient Chymists, the Word *Clyssus* imported an Extract prepared of various Substances mixed together; and, among the Moderns, it also signifies a Mixture, containing the various Products of one Substance united with each other; when, for Instance, the distilled Water, the Spirit, the Oil, the Salt, and the Tincture, of Wormwood, are so blended, that the Mixture is possessed of all the united Virtues of the Simple, from which these various Preparations are obtained. According to this latter Sense of the Word, *Rulandus*, in his Lexicon, informs us, that "a Clyssus may contain the whole Essence of any Substance, when, by a Separation of its impure and seculent Parts, its essential and constituent Principles are reduced to one Compound; or, a Clyssus is an Extract of all the subtle Parts of any Plant combined and united in one common Substance." According to *Poterius*, a Clyssus is a certain Union of all those Virtues of any Plant, which exist in the three constituent Principles of Bodies, Sulphur, Salt, and Mercury, extracted from the several Parts of the Plant; when, for Instance, these three Principles are extracted from the Roots treated apart, and then from the Leaves, the Fruit, and the Seeds, and afterwards mixed, and sufficiently united and incorporated, with each other. The Oil is first to be mixed with the Salt over a moderate Fire, agitating them gently together. The distilled Water, which is that spirituous Liquor resembling Aqua Vitæ, is to be added last of all, and is properly the Mercury, the Elixir, and the Quintessence of the Plant. If there is a considerable Quantity of Liquor, these Substances are most easily incorporated with each other by repeated Cohobations, with the Mouths of the Vessels close-stopt for this Purpose. They may also be converted into a Powder, or into any other Form, at Pleasure; but they are most commo-

\* Instances of this kind are frequent enough in *Tulpius, De Graaf, Platerus, Rhodius, Plazzonius, Panarolus, Paullinus*, and others.



diously kept under the Form of an Extract. They are very commodious for Use, and may be exhibited either dissolved in some proper Liquor, or in the Form of a Bolus, or that of Pills. The Dose is only to be known and ascertained by Experience. In exhibiting Medicines of this Nature, the Physician must chuse a proper Time, and carefully advert to the Nature of the Disease, the Condition of the Patient, and the State of the Weather. *Borrhius*, in his Treatise *De Usu Plantarum indigenarum in Medicina*, speaks in the following Manner, with respect to the Use and Method of preparing a Clystus of this Kind :

Take, says he, any recent Plant, or Flower, or Seed, or Root, or all those together; bruise them in a Mortar of Stone, or Iron. Immediately after, without waiting for a Fermentation, from a low, but pretty large, Glass Cucurbit, extract, and keep for Use all the Liquor, which can be obtained in this Manner, in Balneo Mariæ; whilst at the same time the Vessel is deep-lodged among wet Sand.

We must observe, that, from most Plants thus treated, a far more efficacious Water is obtained, than the common distill'd Waters; and this Water is also accompanied with an Oil. After this, take out the remaining Parts of the Plant, which are now perfectly dry, and consequently Proof against Putrefaction, and preserve them in a wooden Vessel for future Use; and, when Necessity requires, add to this dry Magma a Quantity of any proper Water, sufficient to rise an Inch or two above it, and leave the Whole upon warm Ashes for a Quarter of an Hour. Then express the Liquor strongly, and, if it is necessary, strain it, that it may, at last, become clear by subsiding. What is thus clarified, is to be exhibited with a little Sugar, if the Patient nauseates it without, or with thrice the Quantity of Broth. The seculent Parts, still remaining in the Vessel, are to be put into an earthen Vessel, close stopped, and calcined to black Ashes; and, making a Lixivium of it, add the yellowish Salt, collected from that Lixivium, to the Liquor formerly expressed, or, if you please, keep it by itself. By this Method, none of the Virtues of the Plant are lost, and no useless or corrupted Parts of it are kept in the Shops. Nor is an empyreumatic Taste to be dreaded, if the Sand, in which the Cucurbit is placed, be continually moistened with Water. By this means, the Farrago of Syrups, and the numerous Vessels filled with the insignificant Waters of the Shops, may be justly laid aside, and those far more salutary Waters kept in fewer and smaller Glasses. If to this Mixture or Clystus, when become pure, we add good Vinegar, there will be produced instantaneously the Vinegar of Scordium, of Roses, of Clove-julyflowers, of Raspberries, or of Sage, according to the Diversity of the Clystus. If compound Mixtures are desired, they may be transformed into Clystuses with as much Ease as simple Plants, by extracting, by Distillation, the Principles from several Substances at one and the same time, and afterwards adding them, at Pleasure, to their inspissated Juices, and clarifying them. It will amount almost to the same thing, whether this dry Magma, remaining in the Cucurbit after Distillation, be kept for Use in wooden Boxes, or whether, by boiling in Fountain-water, and afterwards by a gentle Evaporation, it be reduced to what we call a Rob, and kept in Phials for extemporaneous Purposes. Nor is it of any Importance to object, that, in this Case, the Spirits of the Plants, which are the most efficacious Means of Health, are excluded; for the more pure these Spirits are, the more severely they sometimes shock the Patient, and injure the natural Spirits of the Body; whereas this Mixture, when prudently exhibited, acts moderately, and produces no preternatural Heat in the Body. The drier Plants and Seeds, upon Distillation, yield so small a Quantity of Liquor, that it is scarce sufficient to moisten the Magma; for which Reason the Magma, remaining in the Cucurbit after Distillation, is to be boiled in Spring-water, and inspissated to a Rob. After this, it is customary to add its native Liquor to it, that it may, by that means, be reduced to a proper Consistence. But the Reason, why, for this Purpose, we rather chuse yellowish Salts, than such as are white, is, because the white Salts, being long exposed to the Violence of the Fire, have, by that means, lost almost all the essential Virtues of the Plants; whereas the yellowish Salts, in consequence of their being gently exposed to the Fire in a close Vessel, retain more native Oil and Sulphur. 'Tis certain, that only a small Quantity of Salt can be obtain'd in this manner; but what is obtain'd, is found to partake the more of the Virtue of the Plant. If we afterwards have a mind to subject this black inspissated Substance to an open Fire, more Salt will indeed be obtained, but less of the native Virtues of the Plant. From what has been said, 'tis obvious, that, by this Method, we may obtain all the united active Virtues of one or more Plants, which may be expected in the Salt, and the essential Oil, whilst, at the same time, the elemental Water serves for a Vehicle accommodated to medicinal Uses. *Borrhaave*, in the thirty-ninth Process of the second Volume of his *Chymistry*, proceeds in a Manner somewhat different from this.

“ Take, says he, a Dram of any Elæosaccharum, and two  
“ Drams of the medicated Salt of *Tacherius*; grind them  
“ together strongly, and for a considerable Time, in a  
“ Glass Mortar, till they become thoroughly mixed; then  
“ add six Ounces of the cohobated distill'd Water of the  
“ same Plants, of which the Elæosaccharum was made;  
“ and, if a Syrup of the same Plants be kept in the Shops,  
“ a little of it may also be added: And thus, in a small  
“ Compass, the Virtue of a Plant may be collected for  
“ medicinal Uses, and act according to its own Nature in  
“ the Body. The Salt of *Tachenius* will not here commu-  
“ nicate any Virtue foreign to the Design, tho' prepared  
“ from a different Plant; for the particular Virtue of  
“ Plants does not reside in the Salts, but in their essential  
“ Oil. If a Person therefore, for making this medicated  
“ Liquor from Cinnamon, should add the Salt obtained  
“ from burnt Cinnamon, he would lose more of that Aro-  
“ matic, or more Labour, than the Virtue of the Liquor  
“ would compensate.”

By this means, the proper Virtues of every Plant are obtained concentrated, because the elementary Water is the same in all Plants, and therefore does not alter their Effects. The Salt also loses its own Nature in the Burning, scarce retaining more than the common one, and therefore proves of the same Virtues, whatever the Plants be that afforded it; so that all the peculiar Virtue of a Plant remains in its presiding Spirit, which is here separated, and lodged in the Oil: Whence this Preparation is extremely commodious, efficacious, and useful, if the medicinal Virtue of the Plant be previously well known; for thus we obtain a certain, tho' a less perfect Kind, of saponaceous, oily, essential Salt of the Plant, than that in which the learned *Helmont* places almost all the Efficacy of Medicines. The Dose of these medicated Liquors is principally determined from the Power of the Oil employed in them. The most proper Time for exhibiting them is, when the Stomach is empty; but, when they are used, a due Regard ought to be had to the Nature of the Disease: For Instance, a simple Tertian Fever, very cold in the Beginning, is to be cured after this manner: Two Hours before the Fit is expected, let the Patient use a warm Bath to his Legs and Feet, till he grows moderately hot; and afterwards take, every Quarter of an Hour, half an Ounce of the medicated Liquor, prepared from the Water, Oil, and Salt, of Wormwood; then let his Feet and Legs be well rub'd, and the whole Regimen be continued till two Hours after the Fit was expected. And by this means all these Cases are generally cured with Ease and Safety, even in old Age, except there be any Scirrhus or Suppuration attending them. So again, in the Case of Worms, a like Preparation from Tansey, being given for some time upon an empty Stomach, proves excellent; but here, instead of the Salt of Tansey, which is scarce, the Salt of Wormwood may be used. *Rieger. Boerhaave.*

#### CLYSSUS ANTIMONII.

This Liquor is also called *Aqua Stimmi Sulphurea*, *Clystus Mineralis*, and, in the *Dispensatorium Brandenburgense*, *Spiritus Antimonii*. It is a Liquor obtained from a Mixture of Antimony, Nitre, and Sulphur, thrown by Spoonfuls into a Retort, whose Bottom is red-hot, arising from their Detonation, and collected in Vapours, applying at the same time to the Retort a large Receiver, with some Water in it. The Proportion of the Ingredients is varied, according to the Humours or Intentions of different Operators. It is a somewhat acid Spirit, partaking much of the Nature of Spirit of Vitriol, which proceeds from the kindling of the Sulphur, both of the common Sort which was added, and also what was contained in the Antimony, and united with the inflammable Portion of the Nitre in the Detonation.

It serves for various Purposes; for it is prescribed to feverish Patients, in order to procure a grateful Acidity to their Potions. It is also exhibited to such as labour under a Loss of Appetite. *Schulzius*, in his *Prælectiones*, informs us, that, by the Use of it continued for some time, he has known the Worms of Children expelled, and obstinate Epilepsies cur'd; and perhaps the Person who first added Spirit of Vitriol to the compound Water of Swallows, observed Instances of the like Nature. It may be exhibited from three to fifteen or twenty Drops, according as it contains a smaller or larger Quantity of Phlegm, provided it be diluted in a large Quantity of some aqueous Vehicle. According to *Ettmuller*, in *Tom. 2.* it is observable, that, in making this Clystus, during the Detonation, there are raised at the same time, in the Neck of the Retort, redish Flowers of Antimony, of a somewhat acid Taste, and which, when edulcorated with common warm Water, may be kept as a Succedaneum to the Flowers of Antimony. Some prepare the Clystus of Antimony with Tartar, instead of Sulphur; but, in this Case, a more ungrateful Liquor is yielded, or an urinous, volatile, diaphoretic, diuretic, carminative, and antiacid Spirit, which is called *Aqua Tartarea*.

CLYSTER, or CLYSTERIUM; κλύστρος, or κλύστρον, from κλύω, to wash. A Clyster. See ENEMA.



CNACOS, CNECOS, *κνᾶκος, κνηκός*. A sort of Colour between White and a yellowish or fallow Colour. *Castellus*.

CNAPHOS, *κνᾶφος*, is the *Carduus Fullonum*, Teasel; and in *Hippocrates*, *Lib. 2. περὶ γυναικείων*, signifies a Fuller's Shop.

CNEMATA, *κνήματα*, in *Galen's Exegetis*, are expounded by *ξύσματα*, Parings, Scrapings, Shavings. Some Copies read *κνήσματα*, and so it is written *Lib. περὶ φύτ. παίδας*.

CNEMIUM, *κνήμις*, is expounded by *Galen*, τῆς τῆς κνήμης, "of something pertaining to the Tibia." Perhaps it should be *κνήμαίς*, as the best Copies have it. *Fœsius*.

CNEMODACTYLÆUS, *κνημοδακτυλαῖος*. The Name for the *Musculus Extensor digitorum Pedis communis*. *Castellus*.

CNEORON, *κνέωρον*. The *Cneoron* is the same as the *Gnestron*, or *Thymelæa*, as appears from *Dioscorides*, *Lib. 4. Cap. 173.* and *Pliny*, *Lib. 13. Cap. 21.* who say, "That some call this Shrub *Thymelæa*, others *Chamelæa*, others *Pyras Achne*, others *Gnestron*, others *Cneoron*." A Decoction of the *Cnestron* is directed by *Hippocrates*, *Lib. 1. περὶ γυναικ.* as a Purge for Phlegm and Bile; and *Lib. 2.* of the same Treatise he orders a Decoction of two Potions (*δύο πόσας*) of *Cnestrum* to be boiled in a Cotyle of Water, and mix'd with *Oleum Narcissinum*, or *Anthinum*, to be injected into the Uterus, under an Inflammation of that Part.

CNEORON *Album* is the *Convolvulus*; major; rectus; Creticus; *argenteus*. See *CONVOLVULUS*.

The *CNEORON nigrum* is the *Thymelæa*; Alpina; linifolia; humilior; flore purpureo; odoratissima. See *THYMELÆA*.

The last is supposed to be the *Cneoron* or *Cnestron* of *Hippocrates* and *Galen*.

CNESERA, *κνησέρα*. A Sieve or Searse.

CNESIS, *κνήσις*. The same as *κνήσμος*, *Cnesmos*, (from *κνᾶω*, to scratch) which, as *Galen* says, *Com. in Aph. 4. Sect. 5. Lib. 6.* signifies that eager Hurry and Motion with which Animals employ their Nails in scratching any Part about them which itches; and this is no more than what is natural to them all, as he observes. But it is more generally meant of the Itching itself, in which Sense one has defin'd it a dolorific Pleasure excited in the Skin, by a thin, salt, acrimonious Ichor, without an Exulceration.

CNESMA, *κνήσμα*. See *CNEMATA*.

CNESMOS. See *CNESIS*.

CNESTRON, *κνήστρον*. The same as the *CNEORUM*. It also imports a Rasp; which is likewise call'd *Cnestler*. And, particularly, it signifies a Rasp for scraping Cheese.

CNICELÆON, *κνικέλαιον*, from *κνίκος*, *Cnicus*, and *ἐλαιον*, Oil, is Oil made of the Seeds of *Cnicus*, the Manner of which is directed by *Dioscorides*, *Lib. 1. Cap. 44.* The Virtues of it, as the same Author tells us, are the same with those of the Oil of the *Grana Cnidia*, being cathartic, only weaker.

CNICION, *κνίκιον*. A Name in *Dioscorides*, *Lib. 3. Cap. 123.* for the *Trifolium*.

CNICUS. A Name for the *CARTHAMUS*, which see. But the more modern Botanists have excluded the *Carthamus* from the Species of *Cnicus*. According to these, the Characters of the *Cnicus* are,

The Heads are surrounded with a Crown, formed of a Complication of Multitudes of Leaves.

*Boerhaave* mentions nine Species of this Plant, which are,

1. *Cnicus*; perennis; cœruleus; Tingitanus. *H. L. Carduus cœruleus, erectus, Tingitanus, Cnici facie, foliis magis integris*, *M. H. 3. 159.* TANGIER PERENNIAL BLUE DISTAFF-THISTLE.

2. *Cnicus*; *Atractylis lutea* dictus. See *ATRACTYLIS*.

3. *Cnicus*; *Atractylis purpurea* dictus.

4. *Cnicus*; exiguus; capite cancellato; semine tomentoso. *T. 451. Carduus parvus. J. B. 3. 93. Carduus, minimus. Alpini Exot. 254. a.*

*Prosper Alpinus* says it is of no Use in Medicine.

5. *Cnicus*; sylvestris; hirsutior; five *Carduus Benedictus*, *C. B. P. 378. Tourn. Inst. 450. Boerh. Ind. A. 140. Carduus Benedictus, Offic. J. B. 3. 77. Chab. 351. Ger. 1008. Emac. 1171. Park. Parad. 530. Rai Hist. 1. 303. Carduus luteus; procumbens sudorificus & amarus, Hist. Oxon. 3. 160. Carduus-cnicus sylvestris hirsutior, Pluk. Almag. 82. HOLY-THISTLE.*

From a small woody Root, which perishes after giving ripe Seed, there arise several redish hairy Stalks, two Foot high or more, on which grow long hairy green Leaves, cut in, or torn, on both Sides, into several lacinae or Jags, each terminating in a small harmless Spinula. On the Top of the Stalks grow the Flowers, in round Heads, encompassed with several Leaves smaller and shorter than those below, less jagged, and somewhat more prickly: They are yellow and fistular, standing in scaly Calyces, each Scale of which ends in a long slender Spine, denticulated on both Sides like the Saw of a Saw-fish. The Seed is longish, round, and striated, of a brown Colour, encompass'd at the Top with a Crown of stiff Setæ or Bristles,

standing out like the Feathers of a Shuttle-cock. The whole Plant is very bitter. It is sown every Year in Gardens, flowering in June.

*Paulli*, after *Cæsalpinus*, observes, that the Head of this Herb is of a fragrant Smell, resembling that of the Muscadelpear; but *Cæsalpinus* compar'd it to that of Musk itself. This Fragrance, however, does not diffuse itself to a great Distance, nor impregnate the Air at all times; but is principally perceiv'd, when, during a serene and dry State of the Atmosphere, it is formed into a perfect Flower, which, after some time, loses its grateful Scent. Because the Fragrance of this Flower is only to be perceived at a small Distance, being in a manner overbalanced by the fetid Smell of the Herb itself, and because it is surrounded with a large Number of offensive Prickles, he thinks, that none, before the Days of *Cæsalpinus*, had Courage enough to investigate and discover it. The whole Plant is remarkably bitter, except the Root, which has scarce the slightest Degree of Bitterness. Some have observ'd, that when the Buds of the *Carduus* are cut, before they are blown into full-form'd Flowers, they yield a small Quantity of a bloody Juice; but *Matthioli* denies the Truth of this Assertion. This Thistle is dignify'd with the pompous Epithets of *blest* and *holy*, in consequence of its singular Virtues against various Diseases. *Pontedera* is of Opinion, that this Plant was either unknown to the Antients, or at least neglected by them; for he thinks, if they had known its singular Efficacy in the Cure of several Diseases, they would not have conceal'd their Sentiments with respect to this Matter, since they have often bestowed over-done Encomiums upon Plants whose Virtues existed rather in the Imaginations of the Whimsical, than in the Plants themselves. This *Cnicus* is said to have been first imported from the *Indies* by way of Present to the Emperor *Frederic* the Third; at which Juncture it was highly celebrated, either used in Aliments, or Drink, as an excellent Preservative against that Species of Head-ach, which the *Greeks* call *Hemicrania*. The Physicians of this Emperor, in order to ingratiate themselves with their Master, began to use it in various Cases; and, when the Success in Practice answered the Encomiums bestowed upon it, the Plant acquired an uncommon Fame and Reputation. Upon this it was cultivated by such a Number of Hands, that it was in a short time the Produce of various Provinces. It was, however, afterwards discover'd, that this *Cnicus* grew spontaneously in *Europe*; for, according to *Bellonius*, in his *Observations des plusieurs Singularités*, *Lib. 1. Cap. 25.* it is to be frequently met with in the Fields of *Lemnos*, an Island in the *Mediterranean* Sea. It is also produced in *France*, on those towering Parts of the *Alps* called *Marignols*, near *Monstierias* in *Provence*. According to *Ray*, the Species produc'd on the Summits of these Hills is firmer, and somewhat less, than that cultivated in the Gardens. It is at present reckoned among the less valuable Plants, tho' it still retains its former Worth in the Eyes of Physicians, for whose Use it is still cultivated in many Gardens. It flowers in the Summer, and in the Autumn its Seeds become ripe. *Hoffman*, in his Treatise *De Medicamentis Officin. Lib. 2. Cap. 50.* gives us an Account of the Medicinal Virtues of this Plant, in the following Words: "Its Virtues are nearly the same with those of *Wormwood*. Decoctions of it, especially in Wine, are of singular Efficacy when the Patient is not feverish. It is less efficacious when exhibited in Powder, and the distill'd Water is much less so. It is highly extol'd in all pituitous Disorders of the Head, *Hemicranias*, Deafness, Vertigos, Epilepsies, Defluxions on the Breast, Dropsies, Quartan Fevers, and those of long Standing, as these Disorders draw their fatal Origin from Obstructions. It is also celebrated as an excellent Medicine in Colics, nephritic and sciatic Pains, as it partly dissolves the peccant Matter, and partly derives it to the urinary Passages. But its Efficacy is principally celebrated in that formidable Disemper the Plague, against which it is used both internally and externally. Internally it is exhibited both with a preservative and curative Intention, since it powerfully excites a Diaphoresis. Externally it is apply'd for breaking and opening pestilential Buboes, with which Intention it is also apply'd to other Impostumations. In the Opinion of the common People, a Wine, prepared of it in the Autumn, is possessed of so powerful Qualities, that it is little less than a *Panacea*, or universal Remedy. It is preferable to the Wine of *Wormwood*, because, in consequence of its analeptic Quality, it does not prove offensive to the Head, whilst, at the same time, it is equally, if not more, beneficial to the Stomach; for, if I am not much mistaken, it is proper both for bilious and pituitous Patients, as it is a powerful Abstergent: It is also so effectual an Astringent, that it is used in stopping Hæmorrhages." According to *Pontedera*, it abounds with volatile Salts; for which Reason he concludes, that it is highly salutary in Cases where Coagulations or Inspissations of the Juices happen. A Decoction of it, therefore, in Water, may be properly exhibited to Patients labouring under a *Hemicrania*, a Vertigo, an Epilepsy, or a Dulness of Hearing. By the Use



Use of this Decoction colic Pains, arising from preternatural Distentions of the Colon by Flatulences, are often happily removed, as also nephritic Pains, and most Indispositions to which the urinary Vessels are subject. It is also an excellent Medicine for such as labour under Fevers, either of the totally intermittent Kind, or of that Species which never so intermit, that the Patient is quite free from them. By an Exhibition of this Medicine in the Paroxysm, as soon as the Patient's Extremities are become cold, I have known many, says *Pontedera*, speedily cured; which I can also affirm of other Medicines, by my own Prescription exhibited in Agues at that particular Time. *Rulandus*, according to *Ettmuller*, after having previously exhibited a Preparation of Asarabacca, or Antimony, by way of Vomit, orders a Decoction of this Plant, and Leaves of the lesser Centaury, to be used for some Days, in order to promote a Diaphoresis; and he affirms, that by this Method he cured many Patients labouring under Quartan Fevers; for which Purpose he either used this Plant alone, or in Conjunction with Asarabacca-root. The Powder of the tender Leaves in the Middle of the *Carduus Benedictus*, dried, and exhibited three Nights successively in warm Wine, was, according to *Baubine*, the celebrated Arcanum of a certain great Physician in Germany against Fevers. According to *Ettmuller*, "A Dram of the Powder, exhibited with an Intention to promote a Diaphoresis, is, among the common People, a celebrated Remedy for Tertian Fevers; but those of the Quartan Kind do not so easily yield to it." The *Carduus Benedictus* is of a highly penetrating bitter Taste, which, however, does not remain long in the Mouth. It contains little Oil, which is in a small Quantity diffused through the Plant, and rendered almost of a spirituous Quality; for which Reason *Ludovici*, in his *Pharmacopæia*, affirms, that it is scarcely to be obtained. Hence this Plant is possessed of a resolvent and highly sudorific Quality, especially when prepared recent by way of Infusion, since its bitter Principle is of a highly subtle Nature, and renders its Infusion preferable to that of the *Lapis Porcinus*, or Stone found in the Gall-bladder of the Porcupine. For this Reason, infused in Water, and drank like Tea, it is an excellent sudorific Medicine against Fevers, in Patients of languid, cold, pituitous, and lencophlegmatic Habits. And if this Herb is infused either in Wine alone, or Wine mixed with Water, to be drank warm, it, by promoting a powerful Diaphoresis, carries off all intermittent Fevers of a mild Kind, and purifies the Mass of Blood tainted with any Admixtures of adventitious Salts; for which Reason it is no despicable Remedy in scorbutic Cases. According to *Ray*, our Countrymen boil it in Posset-drink, which they exhibit in a small Dose, when the Intention is only to promote a Diaphoresis; but increase the Quantity, when a Vomit is to be excited, or the sordid Contents of the Stomach to be evacuated. According to *Baubine*, *Gesner*, in order to kill Worms of the Intestines, prepared a Powder of the dried Leaves of the *Carduus Benedictus*, a little Cinnamon, Fennel, and Sugar, which he exhibited either in the Morning, or after Supper, with a little toasted Bread soaked in Wine. These Effects ascribed to the *Carduus Benedictus* are to be accounted for from the Bitterness, and the penetrating and resolvent Quality, of the Plant. Hence we understand, for what Reason it is classed among the sudorific, alexipharmic, emmenagogue, antifebrile, and antiscorbutic Medicines. *Hoffman*, in his *Clavis Pharmaceutica Schraderiana*, recommends the following Infusion as a Preservative against all Diseases:

Take of the Herb *Carduus Benedictus*, of the Tops of Wormwood, and the lesser Centaury, each one Ounce: Infuse in two Pints of *Rhenish* Wine, mixed with two Drams of the Spirit of Vitriol. Let them stand in a warm Place for three Days.

The Dose of this Liquor, when strain'd, is a Spoonful or two, to be taken at Bed-time. This Preparation is by some accounted a Specific against the Pleurisy; but, for my own Share, I cannot conceive, how this Medicine can prove effectual against that Disorder by any other Means than by exciting a Diaphoresis, where that is indicated by the State of the Patient. According to *Ettmuller*, it is an excellent Remedy against the Pleurisy, in whatever Manner it is exhibited, but more especially in the Form of a Decoction. Hence it is an Ingredient in the antipleuritic Spirit of *Allichaelis*, which is prepared by pouring Spirit of Wine upon antipleuritic Plants, and subjecting them to a slow Distillation by the Alembic; then it is mixed with Spirit of Nitre, digested, and again subjected to Distillation by the Alembic. Thus the Spiritus Niri Dulcis is obtain'd, which, by itself, is also of an antipleuritic Nature. One or two Drams of this, exhibited in a Water distil'd from the *Carduus Benedictus*, or in any other proper Water, prove an excellent Remedy in Pleurifies accompany'd with a Difficulty of Breathing. This Medicine also excites a Diaphoresis, removes Inflammations, promotes Expectoration, and puts a reasonable Stop to Fevers. According to the same Author, the *Carduus Benedictus* contributes to the Resolution of grumous Blood,

especially when produc'd by Falls from an Eminence, by exciting a Diaphoresis. It also expels the grumous Blood, when attenuated, by the urinary Passages. Thus we are satisfy'd with respect to the several Methods in which this Plant operates, which are either by opening Obstructions, and eliminating the peccant Matter from the Body; or by promoting a Diaphoresis, or a Discharge of the Urine, according to the particular Regimen used for different Intentions. In hot Diseases, the Use of it seems not so much to be dreaded, as that of most other Medicines of a resolvent and sudorific Nature; for, in consequence of its resolving the thick Juices by the Fineness and Subtlety of its Parts, it does not lodge long in the Body, whilst, at the same time, it puts the Humours into a Commotion. For this Reason, to use the Words of *Paulli*, "I think 'tis now known to every body, that malignant Disorders of every kind cannot be more successfully and effectually removed, than by means of a proper Use of the *Carduus Benedictus*." Un-speakable Advantages, therefore, arise from the due Use of this Plant, when Plagues, petechial Fevers, Measles, and the Small-pox, rage. I am also of Opinion, that this Plant acts by its resolvent and penetrating Quality, when used in external Applications. Hence the Steam, arising from a Decoction of it, admitted into the Ears, is said to be an excellent Remedy for Dulness of Hearing, because it opens the Obstructions, and resolves the indurated Sordes of the Ear. *Paulli* affirms, that he had scarce found any Herb comparable to it in consolidating putrid obstinate Ulcers, and even Cancers; and informs us, from *Baubine*, that *Arnoldus de Villa Nova* affirms, that he had seen a Man recovered, who by putrid and hollow Ulcers had the Flesh of his Legs consumed to the very Bones, and who had in vain spent all he had on the Cure. This Patient took the recent Leaves of the *Carduus Benedictus*; and, after bruising them, boil'd them in generous Wine, to which adding melted Hogs-lard, he boiled them together; then putting in some Wheaten-meal, he, without Interruption, agitated the whole Mass with a Spatula, till it assum'd the Consistence of a Plaister, by applying which, twice a Day, warm to his Ulcers, they were cured. *Paulli* also, from *Baubine*, informs us, that a certain Woman, whose Breasts were by a Cancer consumed to the very Ribs, was, by means of the distil'd Water of this Plant, and the Powder of its Leaves sprinkled on the Parts affected, perfectly freed from her Disorder. But *Garidel*, in his *Histoire des Plantes qui naissent aux environs d'Aix*, suspects, that this Passage is hyperbolic, and that by this means, perhaps, a malignant or cancerous Ulcer was cured, but not a genuine and legitimate Cancer, against which no Simple in the Fields, no Plant in the Gardens, no Preparation in the Shops, has hitherto been found effectual. The Seeds of this Plant are possessed of the same Medicinal Virtues with the Plant itself. In Cases where the Hypochondria are indisposed by Flatulences, or Obstructions of the Liver, these Seeds are generally exhibited in hot Wine: Half an Ounce of them may be given for a Dose. They are principally and most frequently used in Emulsions against the Pleurisy, prepared with Water of wild Poppies; in which Case the Patient must be kept warm, in order to promote a Diaphoresis. An Emulsion of the Seeds of the *Carduus Benedictus* is also commonly prepared, with some proper Liquor, for expelling, by a Diaphoresis, the malignant Matter in the Small-pox, Measles, and other malignant Disorders. The Root of this Plant, so far as we know, is used in no Preparation, except that of the *Spanish* Balsam, directed in *Lemery's Pharm. Univers.* There are various Shop-preparations of this Plant, such as the *Succus inspissatus*, which is no more than the Juice express'd from the green Herb, and boil'd over a gentle Fire to the Consistence of a Syrup. A Spoonful of this Juice is an effectual Vomit; but, when exhibited in a smaller Quantity, half a Dram, for Instance, it is recommended for provoking the Menses. In Conjunction with a warm Vehicle, and a proper Regimen, it excites a Diaphoresis. This Effect is also produced by the *Extractum Cardui Benedicti*, (Extract of *Carduus Benedictus*) which is prepared by evaporating the Decoction of the Herb, and is prescrib'd in Pills. A few Grains of it are, by some, also added to purgative Medicines, in order to prevent Flatulences, and Gripes of the Intestines.

If, according to *Schrader*, it is prepared with distil'd Vinegar, it is an excellent Remedy against putrefactive Disorders, such as the Plague; and, according to the Observation of *Ettmuller*, when exhibited from half a Scruple to a whole one, in Conjunction with a little Laudanum Opiatum, it excites so powerful a Diaphoresis, that the Patient seems ready, as it were, to be dissolved in Sweat. The Syrup, prepared from the recent express'd Juice of the Leaves, and made up with Sugar, is, by Nurses and the common People, highly extol'd in Disorders of the Stomach, Crudities, and Loss of Appetite. They also use this Syrup after Sallies of Passion, and in the Colic. They likewise recommend it for killing Worms, and removing Putrefaction; on which account they order it in Pleurifies, in malignant and pestilential Fevers. The Dose is from one to two or three Spoonfuls. The simple distil'd Water, obtain'd from the *Carduus Benedictus*, is one of the Four antipleuritic Waters.



ters. By the good Women it is exhibited in all those Diseases in which the Herb is recommended, especially with a View to increase Transpiration, and promote the Eruption of the Small-pox and Measles; but as this Water is somewhat weak, and slow in its Operation, the Water distil'd from the fermented Plant, in the manner describ'd under the Article AQUA, is preferable, where a Diaphoresis is intended: This is much commended by *Ludowici*. The Essence, prepared from this Herb with Spirit of Wine, is bitter, in Virtues agrees with the Essence of Wormwood, and is, in a peculiar manner, appropriated to Disorders of the Stomach. Twenty, thirty, or more Drops of it may be exhibited for a Dose. The *Oleum distillatum Essentiale* of the *Carduus Benedictus*, in Virtues, agrees with the Oil of Wormwood. These are the most common Preparations from this Plant.

6. Cnicus; five *Carduus Benedictus*; ex Chio. *Volk.*

7. Cnicus; Hispanicus; arborefcens; foetidissimus. *T.* 451. *H. STINKING SPANISH TREE DISTAFF THIS-TLE.*

8. Cnicus; cœruleus; humilis; & mitior. *T.* 451. *Eryngium, minimum, mitius, capitulo magno.* *H. R. Par. H.*

9. Cnicus; cœruleus; asperior. *C. B. P.* 378. *T.* 456. *Carthamus, sive Cnicus, flore cœruleo.* *J. B.* 3. 80. *Carduus erectus, cœruleus, Cnici facie, foliis dissectioribus.* *M. H.* 3. 159. *Boerhaave's Index alter Plantarum, Vol. 1.*

*Dale* mentions another Species of the *Cnicus*, which is,

*CARDUUS PINEA*, *Offic.* *Carduus pinca Theophrasti, Alp.* *Exot.* 126. *Raii Hist.* 1. 301. *Carduus Creticus humillimus integris & angustis foliis, Hist. Oxon.* 3. 159. *Carduus humilis gummifer, magno flore simplici cœruleo, Ejusd.* 158. *Carduus pinea seu Isine Theophrasti, Park.* 970. *Carlina acaulos gummifera, C. B.* 380. *Cinara acaulis gummifera, Raii Hist.* 1. 301. *Cnicus Carlinae folio, acaulos, gummifer, aculeatus, flore purpureo & flore albo, Tourn. Coroll.* 33. *Chamaeleo albus Apulus purpureo flore gummifer, Raii Hist.* 1. 301. *Chamaeleo albus verus acaulis.* THE TRUE CHAMÆLEON, OR CHANGEABLE THISTLE, WITHOUT A STALK, *Park.* 967. THE PINE-THISTLE, *Dale.*

The Country-people of *Apulia*, who attend the Flocks, gather the Gum produced in the Head, and between the Leaves of the Cup. This Gum they call *Cera di Cardo*, because, when it is concreted, it becomes hard like Wax. They use it as a drawing Topic. Whilst it is recent, its Parts cohere, like those of Bird-lime, and it may be drawn out into a Thread of a whitish Colour; for it originally consists of a milky Juice, which, when collected, becomes thick like Wax, and, when handled, assumes a blackish Colour. These Accounts are given by *Colonna*. *Raii Hist. Plant.*

CNIDE, κνίδιον, is a Name in *Dioscorides, Lib. 4. Cap. 94.* for the Urtica, or Nettle.

CNIDELÆON, κνιδέλαιον, from κνίδιον, *Cnidian*, and ἔλαιον, Oil, is Oil made of the *Grana Cnidia*. The Manner of Preparation is shewn in *Dioscorides, Lib. 1. Cap. 43.*

CNIDIA GRANA, *Cnidian* Berries. These are directed, by *Hippocrates*, as a Purge. Modern Botanists do not agree of what Plant this is the Fruit; but most take it to be that of the *Thymelæa, foliis Lini, C. B. P.* Others, however, believe the *Grana Cnidia* to be the Fruit of the *Mezerion*, as *Cordus*, and *Scroder*. *Schulzins* is of Opinion, that they are the Berries of the *Cneoron*, or *Cnestron*. *Ray* says, the Berries of the *Thymelæa* are not the *Grana Cnidia*, but the Seeds contain'd in the Berry. See *THYMELÆA*.

CNIDOSIS, κνιδώσις. An itching and stimulating Sensation, such as is excited by the *Cnide*, or Nettle. The Word occurs several times in *Hippocrates, Prorrh. 2. Celsus, Lib. 2. Cap. 8.* renders κνιδώσις, in *Hippocrates, Pruriginem*.

CNIPES. A kind of small Worms, which infest Vines. See *AMPELITES TERRA*.

CNIPOTES, κνιπότης, is expounded, in *Galen's Exegetis*, by κνισμός, “an itching;” but some, as he observes, take it for a dry Ophthalmy, which is *Erotian's* Exposition of the Word.

CNISMOS, κνισμός, is the same as *CNESMOS*, which see.

CNISSOREGMIA, κνισσορημία, (from κνίσις, a nidorous Smell, and εριον, an Eruetation) a nidorous Eruetation, as ὀξυεργμία is an acid Eruetation. Thus *Castellus*; but he does not seem very happy in compounding of Words, for κνισσορημία and ὀξυεργμία are Terms of a better Stamp, and more expressive of his Meaning.

CNYMA, κνύμα, from κνύω, the same as ξύω, to scrape or grate, in *Hippocrates*, is a Rasure, Punétion, or Vellication; and also the same as *Cnesmos*. *Κνύμα*, in *Galen's Exegetis*, is said to be a Term made by an Onomatopœia to express a gentle or soft Sound; and κνύμα μολύβδιον, *Lib. 2. πικρὸν γυναικ.* is a leaden Pestlary.

CO, COS, COOS, κῶ, κῶς, κῶος. An Island in the *Archipelago*, now call'd *Lango*, the Birth-place of *Hippocrates*, who, from hence, is usually call'd *Cour*.

VOL. II.

COA. A Plant, so named by Father *Plumier*, in Honour of *Hippocrates*. It is a scandent Plant, growing to the Height of five or six Feet, and is an Ever-green, bearing a globular Bell-shaped Flower, consisting of one Leaf, from whose Cup arises a multifid Pointal, fix'd like a Nail in the hinder Part of the Flower, which afterwards becomes a Fruit, composed of three membranaceous Seed-vessels, which are compress'd, bivalve, and divided into two Cells, in which are contain'd oblong wing'd Seed. It grows plentifully in *America*, particularly about *Campeachy*, whence the Seeds have been brought to *England*, and Plants raised from them.

We have but one Species of this Plant, which is,

*Coa scandens, fructu trigemino subrotundo.* *Plum.* CLIMBING COA, WITH A ROUNDISH FRUIT, WHICH OPENS INTO THREE PARTS. *Miller's Dictionary, Vol. 2.*

COACTIO. See *ANANCE*.

It is also the Name of a Disease in Horses, caused by hard Labour, bad Food, or want of Care. It may be call'd a *Surfeit*. *Veg. L. 1. C. 37.*

COACUS. An Epithet of a Treatise of *Hippocrates*, call'd *Coacæ Praenotiones*, from *Coos*, the Birth-place of their Author.

COAGULANTIA. In general, Substances, which, when mix'd with Fluids, coagulate them. But it is usually expressive of Remedies, or Poisons, which coagulate the Blood and Juices.

COAGULATIO.

The *Coagulatio* of the *Latins*, the πύξις of the *Greeks*, and the *Coagulation* of the *English*, import a certain Change in the State of any Liquor, by means of which, instead of retaining its Fluidity, it becomes more or less consistent and solid, according to the Degree of the Coagulation. Changes and Transmutations of this Kind happen almost everywhere in Nature, since solid Bodies seem to be little else than concreted Liquors. The hardest Woods arise from a Concretion and Coagulation of the nutritious Juices. The most solid Parts of animal Bodies, the Bones, for Instance, are gradually and insensibly form'd of an inspissated Fluid. Besides, there are many satisfactory Arguments, proving, that fossile Substances are originally fluid. Some Fluids, by means of Cold, assume a very considerable Degree of Consistence, and are converted into what we call Ice. Coagulations of a morbid and preternatural Kind also happen in the human Body; whence arise Obstructions of those Vessels and Cavities, which ought to remain pervious and open. Heat and Cold are the two principal Instruments commonly used by Nature, for producing Coagulations. Sometimes also Fluids are coagulated by an Admixture of some foreign and adventitious Substance, which produces a firmer Cohesion of their Parts. Apothecaries condense and coagulate Fluids in various Manners, by Evaporation, for Instance, or Distillation, when they prepare the inspissated Juices of Vegetables, Extracts, and Jellies; for, by this means, the most fluid and diluted Parts being carried off, the others, which have a natural Tendency to Coalition, constitute a coagulated Body. This Species of Coagulation is, by Chymists, call'd *Coagulatio per Segregationem*, or *per Separationem*. Its Opposite is what they commonly call *Coagulatio per Comprehensionem*; which is, when the Whole of the Fluid, without the Loss of any of its Parts, is so treated as to be coagulated into an uniform Substance. Whoever intends to produce Coagulations of the former Kind, ought to advert to the following Advice of *Hoffman*. “If, says he, in order to produce the Consistence of an inspissated Extract, any Fluid is to be drawn off, this is to be done in *Balneo Mariae*, that an Emphyreuma, and the Adulstion of the Particles of the Extract, may be prevented; which is to be observed in preparing the Extracts of Aloes, Opium, and other Vegetables: Or, 'tis still more advisable to carry off the greater Part of the Liquor, over a bare Fire, or by means of a Sand-heat. Then the Inspissation is to be perfected by the Assistance of a more mild and gentle Heat. We must also observe, that some Extracts, as also Robs, and some other Substances, of a like Nature, cannot, by a bare Fire, or a strong Degree of Heat, be reduced to a due State of Consistence, but always remain fluid; whereas they become inspissated, and assume a due Consistence, if, after having been previously and sufficiently boil'd, they are, during a proper time, treated with the mild and gentle Heat of a Stove, or proper Furnace.”

What those Substances are, by the Addition or Interposition of which Fluids assume a Consistence, we are taught, by Chymistry; an Art, which, when genuine, imitates unerring Nature in her Operations: For chymical Coagulations are produced,

1. By Water, either in the way of Congelation, Crystallization, or Precipitation. Congelation is produced by the Assistance of Cold, and is explain'd under its proper Article. Salts, dissolved in Water, are reduced to Crystals after an Evaporation of the Water, by boiling. Thus, if you intend to transform



transform a very fine Powder into a Salt, 'tis absolutely necessary you call in Water to your Assistance; for, when Salts are divested of Water, they assume the State and Condition of a Powder, and do not retain the Form of coherent small Masses. This holds true with respect to all the Species of Vitriol, and metalline Salts in general. Water is also united with common Sulphur, and is the Cause of its Coagulation; for Spirit of Sulphur, obtain'd by the Pell, contains about three fourth Parts of Water, which adhere to the acid Principle residing in it. Water is thus lodged not only in animal and vegetable Substances, but also in Metals themselves; for, in the Earth, almost every thing owes its respective State and Condition to Water. 'Tis by means of this Fluid that Earths cohere; for all Earthen and Clay Vessels are, by means of Water, model'd into their particular Shapes and Forms: Thus Bricks, by an Addition of Water to the Earth, and a proper Application of Fire, are converted into hard stony Substances; which, when reduced to a Powder, and subjected to Distillation, yield a certain Quantity of Water. Thus also Stones are form'd of the Water dropping from the Roofs of certain Caverns, when coagulated and inspissated. That Coagulations are produced by Precipitation, we learn from the Preparation of the *Mercurius Vitæ*; whilst, for Instance, the Oil of Antimony, which, in a liquid Form, keeps the Regulus of Antimony dissolved in the Acid of the Sea-salt, precipitates a Powder, when dropt into pure Water. Camphire, dissolved in oleous and acid Menstruums, is coagulated by an Affusion of Water.

2. Coagulations are also produced by Oil, with the Application of a due Degree of Fire, which unites the Parts of Sulphur, Salts, and Metals: Thus Oil coagulates an alkaline Salt into a Soap: Sulphurs are, by means of Oil, transform'd into Balsams of a very thick Consistence. Sugar of Lead and Litharge, when boil'd for a considerable time in Oil, are reduced into one solid Mass.

3. Alcohol of Wine coagulates alkaline volatile Spirits, the Whites of Eggs, the Serum of the Blood, the Oil of Vitriol, and the Spirit of Nitre.

4. An alkaline and an acid Salt are united together in a solid Coagulum, as is obvious from the Preparation of vitriolated Tartar, from a Combination of the Oil of Tartar *per Deliquium*, and the Oil of Vitriol: Thus rectified Butter of Antimony is form'd into a Coagulum with Oil of Tartar; Spirit of Urine is coagulated with a strong Solution of Vitriol. Spirit of Nitre coagulates with any fix'd Salt, as we learn from the Preparation of the *Nitrum Regeneratum*.

5. Coagulations are produced by alkaline fix'd Salts, as in Milk, for Instance. Those are, therefore, in an Error who lay it down as an Axiom, that alkaline Salts dissolve, and acid Salts coagulate; for an Experiment, made by the celebrated Mr. *Matte*, Royal Professor of Chymistry at *Montpelier*, demonstrates, that what has been coagulated by an alkaline is sometimes dissolved by an acid Salt. He reduced, for Instance, to a Powder, that Substance which remains in the Retort after the Distillation of the Spirit of volatile Sal Ammoniac with Lime. This Substance he boil'd in pure Water for two Hours. He afterwards filtrated this Water, and permitted some Part of it to evaporate, stirring it now-and-then with a wooden Spatula, till a Pellicule was form'd on its Surface. Then he mix'd two Drams of it with two Drams of the Oil of Tartar, *per Deliquium*, in a Glass Vessel, agitating them with a Stick, in order to unite them the more effectually. In a short time the Mixture was reduced to such a Consistence, that small Balls might be made of it, which might be roll'd up and down the Table without losing their Form. By an Affusion of the Spirit of Nitre the Liquor recover'd its former Fluidity, which was again removed by an Affusion of the Oil of Tartar.

6. Coagulations are produced by an acrid Salt, as in Milk, for Instance, Whey, the Whites of Eggs, Bile, the express'd Oils of Olives, and sweet Almonds; as also in some fossile and other Substances: Thus the Oil of Vitriol, with the Fæces of the Regulus of Antimony, dissolved in a subterraneous Cellar, is form'd into a Coagulum. The same Oil runs into a Coagulum with Sea-salt, as also with Filings of Steel. When dropt into Oil of Anise, it produces a perfectly resinous Coagulum. It also produces a Coagulum with a Decoction of Quick-lime and Arsenic. The Tincture of Lead-ore, prepared with the *Acetum Radicatum*, when mix'd with Butter of Antimony, in Process of Time forms a Coagulum; as does also the Spirit of Vinegar, when mix'd with the Calx of Lead, with Coral, or with Pearls. Rectified Spirit of Nitre coagulates Oil of Olives, if digested with it for some Days. From what has been said 'tis obvious, that Acids, mix'd with Alcalis, produce Coagulations.

7. By the Steam or Fume of melted Lead, Mercury is coagulated.

8. By Astringents or Styptics the Whites of Eggs, Milk, and Bile, are coagulated.

9. That by Motion also alone, without the Addition of any sensible Substance, Fluids are transform'd into coagulated or consistent Bodies, we learn from the Churning of Butter, from

the frequently repeated Distillation of the Oil of Turpentine, and Spirit of Wine; as also from the Preparation of the *Mercurius præcipitatus ruber per se*. We now conclude, with Mr. *Boyle*, that many, tho' not all, Coagulations are produced by Salts, as some have erroneously asserted: But, as to the indurating Quality of Salts, it does not, in this Author's Opinion, arise from any peculiar and inexplicable Property, by which they coagulate and brace up Bodies, "but rather from the Figure and Motion of the saline Corpuscles, which seem naturally more disposed, than other concreted Substances, to insinuate themselves into the Pores of other Bodies, and to join their Parts not only to themselves, but also to each other; and that, either by joining these Corpuscles, as it were, with Wedges, or by penetrating a large Number of them by their rigid slender Parts, or by their sharp Corners and Edges, just as Pieces of Paper are kept from being scattered by having a File pass'd thro' them, or as a Knife, thrust into several Pieces of Bread, or Victuals, lifts them all at one and the same time." But in whatever manner any Coagulation is produced, whether by Nature or Art, we may probably conclude, with this Author, that, in order to its Production, the constituent Parts of the Fluid must either be render'd thicker, and less disposed to fluctuate, and roll over each other; or that its component Parts remain in a State of Rest among themselves, with their Surfaces touching each other almost in every Point, just as two polish'd Plates of Marble cohere with each other; or that they be kept in mutual Cohesion, just as two Bodies are fix'd together by a Nail or Cement. Thus a Change of the Texture or Disposition of the component Parts of the Body must be allow'd to be most commonly the Cause of the Coagulation, in whatever manner it is produced. To these various Species of Coagulation we must add what *Beecher* has said, concerning the *Coagulatio Continui*, the *Coagulatio Partis*, and the *Coagulatio Totius*. The *Coagulatio Continui* is produced in two Manners, either by Impassation or Condensation: By Impassation, when Powders are mix'd with Water or Slime; whence, by an Evaporation of the Humidity, the Mixture is coagulated, but again resolved, upon an Addition of it. Coagulation by Condensation is, when the Substance of Water by its Coldness congeals; in which Case it is again dissolved by Heat, as in Ice, for Instance. In these two Species of the *Coagulatio Continui*, the following Axiom is to be observed: *Whatever is coagulated by Fire, is resolved by Water; and, vice versa, whatever is coagulated by Water is resolved by Fire.* The *Coagulatio Partis* is when an oleous adheres to a saline Principle, Sulphur to Salt, Oil to Water, Male to Female, dry to moist, and what is volatile to what is fix'd. This Species of Coagulation is resolved either in the way of Sympathy, or in the way of Antipathy; in the way of Sympathy, by a Substance like itself; in the way of Antipathy, by a Substance opposite to itself. With respect to this Coagulation, the following Axioms are to be laid down: *What is weak yields to what is stronger. Things of similar Natures agree with each other. Nature intends the most perfect Productions. The Life of one Substance is the Destruction of another. Let every Separation be made with Modesty and Caution.* The *Coagulatio Totius* is also of two Kinds, preternatural and natural. The preternatural is when heterogeneous Substances are coagulated; whereas the natural is, when homogeneous Fluids are coagulated by way of Generation. *Rieger*.

#### COAGULUM.

The Coagulum of the *Latins*, the *πύμα* and the *τῆμις* of the *Greeks*, are the same with what in *English* we call *Rennet*. This is the concreted Milk found in the Stomach of sucking Quadrupeds, which have as yet received no other Nourishment than their Mothers Milk. It is found not only in the Stomachs of cloven-footed, ruminating Animals, but also in those of clove-hooved Quadrupeds, such as Horses and Asses, and in the Stomachs of those Animals, whose Feet are furnished with Claws, such as these of the Hare-kind. In ruminating Animals, which have a considerable Number of Stomachs, it is generally found in the last, which is called *Abomasus*, tho' it is sometimes to be met with in some of the other Stomachs, especially in the third, which is called *Omasus*, included in the numerous Folds of its Membranes, which occur there. But the Reason why it is generally found in the last Stomach of Calves, when killed, is, because these Animals are rarely killed immediately after Suction; so that, in Process of Time, the coagulated Milk may have passed from the other Stomachs to the last. The Antients affirmed, that all Rennet in general was of the same acrid Nature; that it was beneficial in stopping Fluxes, checking the exorbitant Discharge of the Menstrues, preventing the fatal Effects of Poisons, resolving coagulated Milk in the Stomach, and diluting concreted Blood. *Aristotle* maintained, that Rennet was possessed of a highly hot and fiery Quality; that the older it was, the more valuable and efficacious it became; that it was an excellent Cure for Fluxes; and that the Rennet of a Calf of a Red Deer was preferable to that of other Animals. But, according to *Galen*, that of the Hare is the most valuable. *Dioscorides* informs us, that the Rennet of every Animal, in which



it is to be found, coagulates fluid Substances, and resolves such as are coagulated. *Hippocrates*, in the second Book of his Treatise *De Morbis Mulierum*, for Fluxes, and all Disorders of the Uterus, prescribes a Potion prepared of Wine, the Rennet of an Ass, the Root of the sweet Pomgranate, and Galls. According to *Galen*, some of the Antients, in their Writings, also affirmed, that the Rennet of the Hare, drank with Vinegar, proved a Cure for epileptic Patients. *Caelius Aurelianus*, however, in the fourth Chapter of the first Book of his Treatise *De Tardis Passionibus*, rejects the Use of Rennet in the Cure of Epilepsies. *Averroes*, according to *Hieronymus Mercurialis in Morb. Mul. L. 3. C. 5.* advanced in his Works, that every Species of Rennet was possessed of an astringent Quality, as was obvious from Fluxes being stopped by the Exhibition of Rennet. *Mercurialis* affirms, that this Opinion of *Averroes* is true, and confirmed by Experience; but that, notwithstanding this, Rennets are of a highly resolvent and attenuating Nature; and he thinks, that the astringent Virtue of Rennets depends on some occult Property; whereas their attenuating and resolvent Virtues depend upon their manifest and sensible Qualities. *Riverius* informs us, that, against an immoderate Flux of the Menses, the Women in France use half a Scruple of the Rennet of a Kid or Hare; which not only stops the Discharge of the Blood, but dissolves and attenuates it, when concremented in the Uterus. *Rondeletius*, in his Treatise *De Ponderibus*, determines the Dose of Rennets in internal Medicines to be from one to twelve Grains; and, in external Applications, he allows the Quantity to be from a Scruple to a Dram. In the *Antidotarium Florentinum*, the Rennet of the Hare is said to be, of all others, the best for medicinal Purposes; that of the Kid is said to come next to it; and that of the Calf of the Red Deer next to that of the Kid. It is to be taken from these Animals before they have tasted any thing, except their Mothers Milk. The Rennet of the Sea-Calf is also highly commended, if taken from the Animal before it can swim about with its Mother in Quest of Prey. These Rennets, if dried in the Smoke, or in the Sun, and kept in a dry Place, preserve their Virtues for a Year or two. So far as we know, Rennets are, at present, neither kept in the Shops, nor prescribed by the Physician. Besides the medicinal Uses of Rennets, the Antients applied them for coagulating Milk, in order to make Cheese; for which Purpose they generally chose that of a Lamb or Kid, according to *Columella, L. 7. Cap. 8.* and *Pallad. L. 6. Tit. 9.* *Varro, L. 2. Cap. 4.* affirms, that the Rennets of the Hare and Kid were more esteemed than that of the Lamb. *Pliny*, in the forty-first Chapter of his eleventh Book, informs us, that the Rennets of the Calf of the Red Deer, the Hare, and the Kid, were highly esteemed. The Virtues of the Rennet in coagulating Milk, and separating its serous Part for the Formation of Cheese, are sufficiently known to the most ignorant of the Country People. According to *Johannes Jacobus Scheuchzerus*, in his *Itinera Alpina*, the Inhabitants of Switzerland take two Calves Stomachs, and an Handful of common Salt; then pouring upon these common Water, till they are covered, they suffer them to macerate for about two Weeks. Of the Liquor, thus prepared, a Spoonful is used for coagulating thirty or forty Pints of warm Milk, stirring all about, in order to mix them the more effectually. If too large a Quantity of this Liquor is mixed with the Milk, the Cheese made of it has too salt a Taste; a Circumstance which proves, that some Particles of that Salt coalesce with the coagulated Parts of the Milk. For this Reason, some rather chuse Rennet prepared of the Stomachs of Calves, or Lambs, dried, bruised in a Mortar, and macerated in Vinegar. Others prepare Rennet in a different manner, especially that of the Calf, for coagulating Milk, in order to make Cheese. Some also keep their Art of preparing the Rennet a Secret, especially in Holland, where, by their Method of preparing it, they render the Whey highly grateful to the Taste. Here, in England, some take the interior Membrane of a Calf's Stomach, well washed from its Sordes. This, after salting it, they hang up in brown Paper. When they intend to use it, they wash off the Salt, and macerate a small Portion of it during a Night, in a few Spoonfuls of Water, which they afterwards pour into Milk, with an Intention to coagulate it. We must here observe, that not only the Rennet of the Calf, which is most generally used, but also the Stomach, in which it is contained, coagulates warm Milk, without any previous Preparation. It also tinges the Juice of the Turnsole of a redish Colour, and proves a brisk Purge. Hence we may justly infer the acid Nature of Rennets. Whoever reflects, that Milk, kept for some time in a warm Place, recedes from its mild Nature, and becomes more and more acrescent, and that, in a particular Manner, its pinguious Parts, called the Cream, become rancid, will easily and readily conceive, first, that Rennets are principally of an acid Nature, on account of the large Number of Parts contained in the Milk, from whence Rennet derives its Origin, which incline to an Acid, and are intermixed with others, which have a Tendency to become rancid. Secondly, that the acid Acrimony must be more or less prevalent than the rancid Acrimony, according to the Nature of the Animal, of whose Milk, impregn-

ated with a greater or smaller Number of pinguious Parts, the Coagulum is produced. Thus Rennets are possessed of an Acrimony, which partakes both of an acid and of a rancid Nature; and there will be some Difference between the Rennets of different Animals, according as they are possessed of greater or smaller Degrees of Rancidity. But in this they all agree, that they belong to the Class of acrid and resolvent Medicines. As for the astringent Virtue of Rennets, this seems only to be ascribed to them, because they are found beneficial in the Cure of Fluxes. I am inclined to think, that where-ever Rennets have really been observed by Physicians to suppress any Fluxes, their Efficacy, in this respect, may be derived from their resolvent Quality; inasmuch as they expelled the peccant and irritating Matter, which was the Cause of the Flux, or resolved the concreted Matter, which formed the Obstructions; and consequently removed the Spasms arising from them, which frequently prove the Causes of an Hemorrhage. *Galen* therefore, in his Treatise *De Medic. Facult. L. 10. Cap. 2.* condemns the Advice of some, who, in their Writings, have asserted, that the Rennet of the Hare drank contributes to the Suppression of bloody Vomiting, because it is an acrid Remedy; whereas the Disorder indicates the Use of Astringents. According to *Martin Shookius*, in his Treatise *De Aversatione Casei*, the same *Galen* observed, that the Acrimony of the Rennet is conveyed from it to the Cheese, during its Preparation. But nobody, who eats acrid Cheese, is sensible of any astringent Quality; which, in like manner, is not proved by asserting, that Rennets coagulate Milk; for, besides Acids and Astringents, this Effect may be also produced by other acrid Substances, and even by Alcalis, as is obvious in the Article COAGULATIO.

From what has been said above with respect to the resolving Virtue of Rennet, the Reason is obvious, why Rennet is found an effectual Medicine in Cases where the Stomach has been overcharged by a Debauch, or, as it is usually expressed, *surfeited*, when exhibited in the Manner directed under the Article ALCALI.

Hence also a Reason may be deduced, why Cheese, when strong of the Rennet, and old, may be possessed of a resolvent Virtue, and assist the Stomach in attenuating the Aliment, when it overloads this Organ, in consequence of its being superior to the Powers of Digestion.

COALESCENTIA. Coalescence. The Union or growing together of two Bodies, before separate. It is principally applied to some Bones in the Body, which are separate during Infancy, but afterwards grow together; or to some morbid Union of Parts, which should naturally be distinct from each other. Thus, there is a Coalescence of the Sides of the Vulva, Anus, and Nares, of the Eyelids, Fingers, Toes, and many other Parts.

COALTERNE Febris. Fevers mentioned by *Bellini*, which, in all Probability, are utterly imaginary. They are described to be two Fevers affecting a Patient at one and the same time, the Paroxysm of one commencing soon after that of the other ends. This second Paroxysm is more likely to belong to the same Fever, which produced the first.

COAPOIBA. See CAPOIBA.

COARCTATIO. Coarctation. A rendering the Canals more narrow; or Contraction of the Diameters of the Vessels.

A Coarctation of the Pulse is its Diminution.

COARTICULATIO. The same as ABARTICULATIO, which see.

COAXOCHITL. The American Name for the *Tagetes*; *Indicus*; *minimus*; *flore sericea hirsutie obfita*. Boerh. Ind. alt. See TAGETES.

COBALTUM. Cobalt. See ARSENICUM and CADMIA.

COBASTOLI. Ashes. *Rulandus*.

COBBAN. A small Tree like the Peach-tree, which grows in Sumatra, called *Persea affinis* in *Taprobana*. C. B. *Arbor Gebuph*, *sive Cobban*. J. B.

It bears a small Leaf, like that of the Tree which produces the *Silique Cathartica*, with short Branches, and a yellowish or saffron-colour'd Bark. The Fruit is pretty thick, and round, like a Tennis-ball, inclosing a Nut as big as a Filbert, which contains a very bitter Kernel, tasting like the Root of Angelica.

The Fruit is very proper to quench Thirst; but the Kernel, however bitter, is far superior in Virtue. The Inhabitants of Sumatra, where the Tree grows, extract an Oil out of the Kernel, which is very efficacious in Pains of the Liver and Spleen, taken inwardly, or used outwardly by way of Unction; and is also a sovereign Remedy in the Pain of the Gout, to which the Inhabitants of this Island are very subject.

From the same Tree distils a Gum, which is very serviceable in the fore-mentioned Disorders, if it be dissolved with a moderate Quantity of Oil, and applied to the affected Parts by way of Cataplasm. *Ray Hist. Plant. p. 1518.*

COBITES. A Species of fresh Water-fish of the Gudgeon-kind, mentioned by *Aldrovandus*.

COBRA DE CAPELLO. The Name of a very venomous Serpent, called also *Serpens Indicus*, Offic. *Serpens Indicus Coronatus*,



*ronatus, Diademate seu Conspicillo insignitus*, Raii Synop. A. 330. *Cobras de Capello Lusitanis dictus*. Garc. ab Hort. *Vipera Indica vittata gesticularia*. Cat. Mus. Ind. *Vipera pileata quibusdam*. INDIAN SERPENT.

The Part of this Serpent in Use, is the Stone, or rather Bone, of the Head, called *Pedro del Cobra*. This Stone of the Serpent, called in *Ind. Med.* 65. by Mistake, *Piedra di Cobra*, is of an oval Figure, plain on one Side, and gibbous on the other, of a brown Colour, shining, with Pores interspersed.

It expels all Sorts of Poisons, either taken inwardly, or outwardly applied. It resists Putrefaction, promotes insensible Perspiration, raises the vital Spirits, comforts the Heart, communicates a new Fermentation to the Blood, and relieves Nature under all malignant Distempers. *Marl. Ob.*

Though this Stone be described by *Garcias*, *Redi*, and others, yet the Learned among the Moderns differ about it principally in two respects, as, 1. Whether it be a Thing natural or factitious. *Kircher*, in his *China Illustrata*, and *Thevenot*, in his Relation of Voyages and Travels, affirm these Stones to be found in the Head of a great Chinese Serpent; Mr. *Boyle*, in the Head of an African Serpent. Others, on the contrary, as Father *Boccone*, in *Museo di Fisica*, suppose them to be artificial Substances, as calcined Bones, and other testaceous Fragments; and *Thevenot* the younger will have them to consist of a Mixture of the Ashes of some burnt Roots, and a sort of Earth found near *Diu* in the *East Indies*.

Another thing in which they differ, is about their Virtues. Father *Kircher* relates several Experiments of their Virtue in extracting the Poison infused by the Bite of a Viper, or another Serpent. Mr. *Boyle*, in his Treatise of specific Medicines, affirms the same from an Experiment made on a young Cat. And *Clayton*, in his Account of *Virginia*, *Act. Philosoph.* No. 210. writes, that he was present when the said Honourable Gentleman tried the Experiment on some Chickens, which all recovered. Dr. *Havers* was an Eye-witness, as he tells us, of the salutary Effects of this Stone upon a Dog; and Dr. *Tyson*, in his *Anatomy of the Rattle-snake*, relates an Observation, which he received from a celebrated Physician of *London*, who, by means hereof, cured a Man, who was bitten by Vipers. *Baglivi* also performed the same thing for one, who was stung by a Scorpion. But, tho' these Experiments succeeded well with all the Persons before-mentioned, yet others, as *Redi* and *Charas*, made the same Trials with a different Success.

Having given this brief Account of the Opinions of the Learned on both Sides, my best Way, I think, is to endeavour to reconcile them. For this End, I shall only observe, that I have seen two Sorts of this kind of Stone; one of which was like a Bone, porous, and had visible Marks of the File; the other was of a more compact Substance, and polished. This I suppose to be the factitious Stone, and a Counterfeit of the former; and therefore conjecture, that the unsuccessful Experiments were made with those artificial Stones, and not with the true.

The *Lapis Colubrinus*, which formerly went at a high Price, is now sold very cheap at *Manile*; but what is thus sold, is not taken from the *Coluber* (Snake), but is made of Hartshorn luted up in an earthen Pot, where it is burnt to a Blackness, and afterwards polished. The *Moors* call this adulterated; but say, it is made of a strange Kind of Clay, like *Terra Sigillata*. The true *Lapis Colubrinus* cures the Bites of Serpents by Application. In a Fever attended with purple Spots, several of these Stones applied relieve the Patient. In the Year 1681 I saved from present Death a Boy of three Years old at *Brama*, who had swallowed Arsenic dissolved in Milk, by the repeated Application of this Stone. It is a Question, whether the Virtue of this Stone is to be ascribed to the Salt in the Hartshorn not being thoroughly burnt, or to its Pores, by which it attracts like a Cupping-glass. *Ex MSS. Camell. Dale.* See BOICININGA.

COCAZOCUITL. The Mexican Name for the *Tagetes*; *Indicus*; *medius*; *flore simplicis, luteo-pallido*. Boerh. I. alt. See TAGETES.

COCCA *Gnidia*, or *Cnidia*. See CNIDIA.

COCCALOS, κόκκαλος. Some call the *Grana Cnidia* by this Name; but the most general Signification of the Word is, the *Nux Pineæ*, or Pine Nut; or rather, in *Hippocrates*, the Kernels. See PINUS.

COCCARIUM. A very small Pill, about the Size of a Cicer. *Oribasii Synopsis*. L. 3.

COCCINELLA. See COCHINILLA.

COCCION, κόκκιον. A Weight in *Myrrhus*; the same as *STILQUA*, which see.

COCCOBALSAMON, κοκκοβάλσαμον, in *Myrrhus*, is the Fruit of the true Balsam-tree.

COCCONES, κόκκωνες. The Grains or *Acini* of the Pomegranate.

COCCONILEA. A Name for the *Coccyria*.

COCCOTHRAUSTES, from κόκκος, a Grain, and θραύω, to break. A Bird, which is found in the Woods of *Italy* and *Germany*, called also *Fringilla Rosstrata*. It receives its Name

from its Manner of Living; for it feeds on the Kernels of Cherry-stones, and other Fruit of the like Kind.

This Bird is recommended as a Remedy for the Epilepsy, and as a Diuretic, if either eaten, or taken by way of Decoction. *Lemery des Drogues*.

COCCULUS INDUS, Offic. Park. Theat. 1582. *Cocculus Officinarum*, Jons. Dend. 156. *Cocculus*, Ind. Med. 38. *Cocculæ Officinarum*, C. B. Pin. 511. Mont. Exot. 11. Pluk. Mant. 52. Phytog. 345. *Cocci Orientales*, Ger. 1365. Emac. 1548. J. B. 348. Raii Hist. 2. 1812. Chab. 26. *Natfatam*, Hort. Mal. 7. 1. Tab. 1. *Arbor Indica Cocculos Officinarum ferens*, Breyn. Prod. 2. 19. Commel. Flor. Mal. 24. *Solanum racemosum Indicum arboreum*, *Cocculos Indos ferens*, Raii Dendr. 115. INDIAN BERRY.

This is a little Berry, about as big as a Bay-berry, but more of a Kidney-shape, having a wrinkled Outside, with a Seam running lengthways from the Back to the Navel. It is of a bitterish Taste, being the Fruit of a Tree described in the seventh Volume of the *Hortus Malabaricus*, under the Name of *Natfatam*, bearing Leaves in Shape of a Heart, and Bunches of five-leav'd white Flowers, which are succeeded by these Berries. They grow in *Malabar* in the *East Indies*.

They are rarely used in Physic, being accounted to be of a hurtful and pernicious Nature. *Miller's Bot. Off.*

*Condronchius*, who has wrote a Treatise concerning these Berries, informs us, that he had often found from Experience, that a small Quantity of the Powder of these Berries, mix'd with Hogs-lard, a boil'd Apple, or some Substance of a like Nature, if apply'd to the Heads of Children, kill Lice more effectually than Stavesacre, and with less Danger than Quick-silver.

But these Berries are principally used for catching Fishes. *Cardan's* celebrated Receipt for this Purpose runs thus:

Tak of the Berries of the oriental Coccus, a Quarter of an Ounce; of Cumin, and boiling Water, each two Ounces; of Cheese, one Ounce; and of Meal, three Ounces: After bruising these together, form them into small Balls.

Others mix the Berries with old Cheese, Honey, and Wheaten-meal, of which they form small Balls to be thrown to Fishes. Others, for this Purpose, mix a Variety of other Substances with these Berries; but there is no Necessity for so troublesome an Apparatus, since I know from Experience, says *Ray*, that a simple Ball of the Powder of these Berries, made up with Wheaten-meal and Water, is equally efficacious for stupifying, and at last killing Fish: For that Fishes, as some assert, are, by eating Balls of this kind, only rendered vertiginous and stupid for a while, but soon return to their natural State, is not confirm'd by Experience; for my own Experience quadrates with the Opinion of those Fishers spoke of by *Condronchius*, and who affirm, that Fishes are soon kill'd by Balls of this kind. But I don't know whether, as they assert, they soon become putrid, and fall into Pieces, unless they are speedily taken out of the Water. If, says *Condronchius*, any should object, that, upon taking these Balls, the Fishes swim up and down with uncommon Haste and Precipitation, by which means their Intoxication or Vertigo is produced, I answer, that they do not thus ramble in consequence of their Vertigo, but in consequence of the intolerable Pain they feel from that unfriendly Substance, just as other Animals, especially Men, do, when they are racked with any intense Pain. I readily grant, that, by these Balls, Fishes are at first rendered vertiginous, and, as it were, intoxicated; but, at the same time, I affirm, that they are soon after kill'd; for I am not so much of Opinion, that they are render'd vertiginous, and kill'd by the bitter and acrid, as by some other hitherto unknown Quality of these Berries. I will not, however, take upon me to determine, whether Fishes, kill'd in this manner, may be safely eaten; but, with *Condronchius*, I am of Opinion, that no Danger attends the Use of them as an Aliment, if they are gutted and boiled as soon as they are taken.

That these Berries are hot, and by no means cold, as *Matthioli* maintains, notwithstanding their narcotic Quality, is sufficiently obvious from their acrid and bitter Taste, as also the other Effects produced by them, as *Condronchius* has evidently demonstrated.

This same Author is of Opinion, that these Berries are by no means possessed of a poisonous and deleterious Quality; and that it is not by this, but by their Bitterness, and primary Qualities, that Fishes are kill'd; but the contrary to me seems plain from a Story related by *Amatus*. A certain Schoolmaster, asking for Cubebs from an ignorant Apothecary, received these Berries in their stead. When the Schoolmaster had greedily devour'd three or four of them, he was seiz'd with a Nausea, Hiccough, and Anxiety, which Symptoms, together with the Danger they threatened, were immediately remov'd by the Exhibition of a Vomit. *Raii Hist. Plant.*



COCCOS, or COCCUM; κόκκος, in *Hippocrates*, when without any Addition, imports the *Cnidia Grana*. But Coccus implies any Berry or Grain.

COCCOS. The Coco-nut. See PALMA; COCCIGERA; ANGULOSA.

COCCUS *Americanus* is the Cochineal. See COCHINILLA.

The COCCUM *baphicum, infectorium, tinctorium, Chermesinum, or Scarlatinum*, is the CHERMES, which see.

The Coccus *Polonicus*, which *Breynius* calls *Coccus Radicum Tinctorius*, because it is principally found adhering to the Roots of the *Polygonum Cocciferum, Kosmaceh Polonis*, C. B. which he takes to be the *Polygonum Germanicum, incanum, flore majore perenni*, Raii, is another sort of Grain us'd in Dying.

This, says *Breynius*, is found sometimes single, sometimes more, even forty adhering to one Plant, of different Sizes, from a Poppy-seed to that of a white Pepper-corn. It is roundish, smooth, and of a purple-violet Colour, and, in a thin Cuticle, incloses a blood-red Juice: One Half, or more of it, is cover'd with a rough dark-brown Crust, by which it adheres to the Roots.

The Countrymen gather it about Midsummer, and dry it with a slow Fire in Earthen Platters.

Several of these Cocci he expos'd to the Sun in open Glasses, and found, that by the 24th of July every one, according to its Size, had excluded a small Worm with six Feet. That Part, which seem'd to be the Head, had two short carnosæ Antennæ; for he could not perceive, with Glasses, any thing like either Mouth or Eyes. On the Back, lengthwise, were two Sulci, which were more or less visible according to the different Motions of the Animalcule. Its Feet seem'd arm'd with Claws, and the first Pair stronger and darker than the rest. The whole Worm was of an obsolete Purple-colour, and had several Bristles of a brown-grey.

These, after ten or fourteen Days, lay in a State of Rest, and soon became covered with an exceeding white, fine, lanuginose Substance; in which Condition they continued five or eight Days longer, and then laid their Eggs; fifty, one hundred, or more, apiece; which, to the naked Eye, appeared but like so many red oblongish Points, but, with Glasses, looked like Ants Eggs, almost transparent, with a diluted blood-red Content.

These Eggs, being again expos'd in the Sun about *Bartholomew-tide*, were hatched a Month after, when some Vermiculi were excluded, which, in the Microscope, appear'd to be Hexapods of a purplish Hue, with two Antennæ at their Head, and two greyish Bristles at their Tails, scarce visible, except upon black Paper.

He supposes these last-excluded Vermiculi, after some Wanderings, at last fix themselves to the Roots, and some of the lowest contiguous Branches, of the *Polygonum*, where, being deprived of local Motion and Sense, by some way or other, they imbibe that Juice from the Plant, and at last become the Cocci, so call'd, or Vesicles full of that blood-red Juice, so useful in Dying.

This Insect, under what Shape soever it appears, either of a Grain, a Male Worm, a Nymph, a Fly, a Female Worm, or a Worm coming out of an Egg, always, when press'd and crush'd, affords a Matter of a Purple-colour, which, however, is observ'd to run most copious in the Cocci and the Worms, especially the Female ones. *Phil. Trans. abr. Vol. 8.*

As for the Medicinal Uses of this Species of Coccus, the learned *Paulli* informs us, that the common People in *Silesia* swallow every Year three Grains of it, in order to prevent the Attack of Fevers; but he justly censures this as a superstitious Practice, as it is not attended with the propos'd Success. The same Author also brands, with the odious Name of Superstition, the Practice of the credulous and giddy Multitude, who, about the Middle of the Day, on St. John's Eve, dig up these Grains, in order to imprint on their Shirts and Breasts certain Characters, with the bloody Juice they yield upon being bruise'd, thinking, by this means, to escape Falls, Contusions, Wounds, the Bites of mad Dogs, and a large Train of other Diseases. But tho' this learned Author affirms, that he has just Cause to detest and condemn the internal Use of this Species of Coccus, yet I see no Reason why they should be reject'd for Medicinal Purposes, since the whimsical Uses, to which superstitious Fools apply any Medicine, can never rob it of its real and inherent Virtues. This I am the rather inclin'd to think, because the Coccus *Polonicus* is found, from Experience, to have the same Efficacy in Medicines as the Kermes, and may be safely us'd as a Succedaneum to them. They are not, however, as yet receiv'd into the Shops. If, in Cases of this Nature, Conjectures are pardonable, I am inclin'd to think, that the Cocco *Polonica*, if subjected to the same Chymical Analysis as the Kermes, would yield the same Principles, and discover themselves to be of a similar Nature. *Rieger.*

COCCUS DE MALDIVA, Offic. Park. Theat. 1598. *Coccus de Maldiva, sive Nux Indica ad venena celebrata*, Chab. 28. Raii Hist. 2. 1359. *Palma coccifera figura ovali*, C. B. Pin. 509. *Nux Indica ad Venena celebris, sive Coccus de Maldiva*, J. B. 1. 384. *Tavaccart, sive Nux Medica Maldivensium*, Pils. Vol. II.

Mant: 203. *Palma Naldivensis, aliis Maldivensis*, Jons. Dendr. 147. THE MALDIVA NUT.

This Nut has a black Rind, which is more shining than that of the common Coco, or Indian Nut, and its Shape is more upon the Oval; and not so round as that of the other; the Medulla, or interior Pulp, when dry'd, is extremely hard, and of a white Colour, somewhat inclining to Paleness, very porous, and full of Clefts in the Superficies, and of no excellent Savour.

The Nuts, which *John Bauhine* saw, were a Foot in Length, and in Compass as much as he could grasp with both Hands; the Part compress'd was six Inches broad, in which appear'd a large Perforation, from another Fruit which was separated, so that the Fruit was really double, and, in that State, was much larger than a Man's Head; the Shell was hard and thick, like that of other Nuts, mark'd with long oblique Striæ on the Outside, and, when struck, sounding like a Pot.

*Garcias* says there is a vulgar Tradition, that the *Maldives* were once a Continent, but, by an Inundation of the Sea, were reduced into a Multitude of Islands; on which Occasion the Palm-trees, which bore these Cocos, were bury'd in the Earth, where their Fruit were hardened in the manner they now find it. But, whether they are of the same Species with other Cocos, is not easy to determine, because none ever saw a Leaf, or a Bough, of the Tree to which they belong, but only the bare Nuts, which are cast upon the Shore, some single, some double; but no one dares gather them up on Peril of his Life, because whatever the Sea throws upon the Shore, belongs to the Sovereign. The Pulp, or medullary Substance, is taken out of the Shell, and then dry'd and harden'd to a Condition fit for Sale.

It is of so high a Value among the Natives and People of *Malabar*, that, as *Acosta* assures us, not only the common Sort, but even their Princes, have recourse to it as to a sovereign Remedy under almost all kinds of Diseases; and it is accounted, in particular, an excellent Alexipharmic. Under this Persuasion they make Drinking-cups of it, and let a Piece of the Pulp hang by a Chain in the Water which they drink, being confident, that no Poison can hurt those who drink out of these Cups, which will, besides, preserve them against many Diseases. But, since these Virtues are not confirm'd by sufficient Experiments, and some Physicians affirm, that they have made use of this Nut for the Purposes aforesaid, but with no Effect; and others say, that they have found by Experience, that this Medicine was more injurious than beneficial; we shall say no more on this Head.

As to its specific Quality, says *Piso*, of promoting and facilitating Delivery in a difficult Labour, and of resisting the Fits of the Epilepsy, we have it confirm'd by more than one Experiment, and those made by some of our most eminent Physicians, who have made use of it with all the desired Success. *Ray, Hist. Plant.*

COCCYGRIA. See COTINUS CORIARIA.

COCCYMELEA. Another Name for the *Cotinus Coriaria*.

COCCYX, or Os Coccygis, κόκκυξ. This Bone is situated at the Extremity of the Os Sacrum, and is, in some measure, an Appendix thereof. The Figure of it is something like that of an inverted Pyramid, a little bent forward toward the Pelvis. The anterior Side is flat, the posterior a little convex. It is made up of four or five Pieces, like false Vertebrae, joined together by Cartilages, more or less pliable. Sometimes all the Pieces are entirely cemented together.

The first Piece is the largest, and, on each Side of its Basis, there are sometimes small Apophyses or Cornua, joined closely to the Extremity of the Os Sacrum. It has also sometimes a kind of transverse Apophyses, with small Notches on their upper Part, which, joining with those in the last Piece of the Os Sacrum, form a Pair of Holes, situated in the same Row with the other large ones. The other Pieces of the Os Coccygis are irregular Squares, diminishing in Size as they descend, so that the lowest is like a Sesamoide Bone.

The Cartilages, which join the different Portions of the Os Coccygis, are preserv'd in some Subjects to a very great Age; in others they soon become entirely bony. *Winflow's Anat.*

COCHIA. A Name for certain officinal Pills. The Etymology of this Word is very obscure. *Gastellus* derives it from κόκκος, a Berry, on account of the Form of Pills; or from κόχῃ, a redundant Flux of Humours, alluding to their Effects. But, as the Prescription is originally Arabic, 'tis probable the Name is so likewise.

*Pilula Cochiae Majores.*

The greater PILL COCHIA.

Take of Hiera Picra, ten Drams; of the Troches of Al-handal, three Drams and a half; of Diagrydium, two Drams and a half; of the most resinous Turpeth, five Drams, and make them into a Consistence fit for Pills with a sufficient Quantity of Syrup of Buckthorn. S. A.



This is taken from the *Rhases, Cap. 1. ad Almanforem*, and was received at first by the *College and Augustan Dispensatories*; but the former Emendation of the College changed the Pulp of Colocynth, which was in the original Prescription, for the Trochisci Alhandal: But this hath further mended it, by rejecting the Stœchas, and making it into a due Consistence with Syrup of Buckthorn instead of Syrup of Stœchas, which is more suitable to the Design of the Medicine; but it is hardly ever used in the present Practice.

*Pilulæ Cochix Minores.*

*The lesser PILL COCHIX.*

Take of bright Aloes, the purest Scammony, and the Pulp of Colocynth, of each one Ounce. When they are powdered, make them into a Mass, with a sufficient Quantity of Syrup of Buckthorn, S. A. adding thereunto two Drams of the distil'd Oil of Cloves.

This is a modern Composition, and the most in Use of any under this Class: It was not in the first *Dispensatories* of the College; and, in the last but one, there were but two Scruples of the Oil of Cloves to the same Proportion of Ingredients; so that this is much warmer, which greatly adds to its Efficacy in many Intentions, especially in colic Pains, and to disperse Viscidities, watery Humours, and Flatulences, for which Purposes it is often prescribed: But then a Grain or two of Opium is generally mixed with it, to make its Operation milder, and prevent the Membranes from being too much irritated therewith. Its Dose is from fifteen Grains to two Scruples to grown Persons.

*Pilulæ Cochix cum Helleboro.*

*PILL COCHIX with HELLEBORE.*

Take the Species of the lesser Pill Cochia, and Powder of black Hellebore, of each one Ounce: Make them into a Mass with Syrup of Stœchas.

This has been in some former Editions of the *College Dispensatory*, but is rejected in the last, where many a great deal worse are retained; for, if this be well understood, it is an admirable Cathartic in maniacal, hypochondriacal, and almost all nervous Cases; and nothing likewise more effectually opens the menstrual Discharges, when they are wanted, than this Medicine. It may be given from fifteen Grains to half a Dram. At first Use it will sometimes vomit, but, after a few Repetitions, it takes more downwards. *Quincy's Dispensatory.*

**COCHINILLA & COCCINILLA**, Offic. *Cochenille*, Duret. 66. *Cochinilla*, Lact. Ind. Occ. 229. *Cochinille*, *frœ Fici Indici grana*, Park. Theat. 1498. *Ficus Indicæ Grana*, C. B. Pin. 458. *Coccinella*, Offic. *Coccus Indicus tinctorius*, Geoff. Traët. 370. *Nopalnocheztli*, seu *Coccus Indicus in Tunis quibusdam nascens*, Nicemb. 312. Hern. 79. *Cochenilla Hispanis*, Breyn. Hist. Cocc. 6. *Scarabeolus hemisphæricus Cochineifer*, Gaz. Pet. T. 1. Fig. 5. Sloan. Hist. Jam. 2. 208. *Scarabeus nigricans alarum alias rubicundus limbis*, Mer-Surin. 2. *Cochineal*, Act. Philosoph. Lond. No. 176. 193. **COCHINEAL**.

This Drug comes from the *West Indies*, but Authors are not agreed as to its Nature, some taking for a kind of Worm, others supposing it to be purely the Grain of a Tree.

Father *Plumier*, a *Minim*, and a famous Botanist, who dy'd in 1704. was of the first Opinion; but *Pomet*, who dy'd about the same time, in his general History of Drugs, strenuously contends for the latter.

It might, perhaps, be prov'd, that they are equally mistaken in their Descriptions of Cochineal, whether it be a Worm, or a Grain; and yet, to reconcile them in some measure, it may be supposed, that there is one Sort of Cochineal which is a Worm, and another which is only a Grain.

This is the Opinion of *Dampier*, an *English Traveller*, who, in his Relation, intitled, *A new Voyage round the World*, where he professes to affirm nothing but what he had seen, or knew the Original of, speaks of both these Sorts of Cochineal.

His Description of them is so exact and circumstantial, that, if it be not true, it is at least more probable than all that has hitherto been said on the Subject. He describes the Worm-cochineal in the following Manner:

Cochineal is an Insect generated in a kind of Fruit very much resembling the Prickly-pear. The Shrub, which bears that Fruit, seldom grows above five or six Feet high, and is very thorny. On the Top of the Fruit grows a red Flower, which, when ripe, turns in upon the Fruit. When this Flower, being dry'd by the Heat of the Sun, falls off, the Fruit opens to the Breadth of two or three Inches, and appears quite full of small Insects, which have Wings of a surprising Minuteness, and would there die and putrify, if they were not removed. As soon, then, as the Fruit is sufficiently open, the *Indians* spread a large Sheet, and beat down the Insects with Poles.

The Tree which produces these Insects is thus distinguish'd:

**COCHINILLIFERA**, Offic. *Ficus Indica major, lævis, frœ non spinosa, Vermiculos, quos Cochinilla vocant, proferens*, Pluk. Phytog. Tab. 231. Almag. 145. *Opuntia maxima, folio oblongo, rotundo, majore, spinulis obtusis, mollibus, & innocentibus, obfeto flore striis rubris variegato*, Cat. Jam. 194. Hist. 2. 152. Raii Dendr. 19. *Tuna mitior flore sanguineo, Cochenillifera*, Dillen. Hort. Eltham. 399. Tab. 297. Fig. 383. *Arbor Cochenille*, Duret. 66. *Nocheznopatl, seu Nopalnocheztli, in quo Coccus Indicus nascitur*, Hern. 78. *Nopalnocheteli seu Nochetzli Nopalli*, Jonf. Dendr. 56. **THE COCHINEAL TREE.** Dale.

There are large Plantations of these Trees at *Guatemala*, *Chepe*, and *Guexaca*, in *Mexico*, as also in the Province of *Tlascala*.

According to *Dampier*, the vegetable Cochineal is produc'd by a Tree not unlike that, from which the animal Species is procur'd. The Fruit of this, when ripe, opens, and discloses a great Number of small Grains, which the *Indians* gather. This, according to the above-quoted Author, affords near as beautiful a Colour as the other Cochineal.

But, I think, it is now universally allow'd, that the Cochineal used in Medicine is an Insect. *Melchior de la Runseher* took the Pains to procure from *Antiquera* in *New Spain*, the Place where there is the greatest Traffick for Cochineal, Attestations upon Oath of eight Persons, who have been immediately employed in propagating and managing it for many Years; from whence the whole Natural History of this Drug is collected. These shew, first, in regard to Cochineal itself,

That they are small living Animals, with a Beak, Eyes, Feet, and Claws; that they creep, climb, seek their Food, and bring forth Young, not changing their Species, as Silkworms, but producing their like; which are not larger than Knits, or small Mites, or the Point of a Needle; but, when come to Maturity, resemble, in Size and Figure, a Dog's Ticke. Thus far is certain; but their Manner of generating is doubtful, tho' it is commonly believed by those who cultivate them, that they are impregnated by a small Butterfly, which is bred upon the Nopal, (the Plant they live upon) which passes and repasses over them.

Secondly, As to the Manner of raising, nourishing, and managing them, it appears, that at the proper Time, that is, after Winter, (when these little Animals can bear the open Air) when the Cochineals, which they have kept in their Houses, are grown so large and big as to produce young ones, they put twelve or fourteen together into a Pastle or little Nest, made of fine soft Hay, or Straw, or Moss of Trees, or the Down, which immediately envelopes the Cocoa Nut. These Pastles are then placed upon the Plants of the Nopal, or prickly *Indian Fig* (which they take care to cultivate well for this Purpose); and in two, three, or four Days, these Animals bring forth a great Number of young ones; soon after which the Mothers die. In the mean while the young ones, coming out of the Nests, climb up the Nopal, fix themselves to it, and suck its Juice, which is their only Nourishment; but do not eat the Plant; and for this Reason they always seek those Parts of it, which are greenish, and fullest of Juice, taking care at the same time to place themselves on the Parts most sheltered from the Wind and Weather. During this Time, whilst they are growing up, and become pregnant, great Care is taken, that no Vermin incommode or kill them, as also to keep them clean, and disengage them from certain Threads, like Cobwebs, which grow upon the Nopal; as likewise to defend them from too much Heat or Cold, from the Rain and Winds, because the fine Cochineals are very tender. Nevertheless the wild Cochineals stand all these Inconveniencies; but then they are so gritty, of so ill a Smell, and of such little Value, that they ought not to be mixed with the fine.

Thirdly, In regard to the gathering of the Cochineal: The first is of the Mothers, which, having brought forth their young, have died in their Nests. Three or four Months after this, as the Season permits, when the first young ones are become sufficiently large and big, and are in a State to bring forth Young in their Turn, and also have produced some few, the *Indians* carefully gather them off the Nopals with a little Stick, to which they fix a little Hair, in the Nature of a Pencil. These Animals being collected in this Manner, and afterwards killed by hot Water or Fire, this is called the second Gathering, or rather the first of the young ones that have been nourished and raised in the open Air. Three or four Months after this, they gather the second Brood of those, which have been born upon the Nopal, which, being become big, have brought forth already some young ones. This they do much in the same manner as before; only now they take off the Plant a great many young ones with their Mothers; which makes this Sort of Cochineal be called *Granilla*, from the Number of small ones found in it. In the mean time they keep a Number of these young ones alive upon the Nopals, which they pluck up, or cut, and lock up in their Houses, to nourish these Animalcules during the rainy Season. Lastly, these being grown large, they put them into the Pastles, and proceed in the Manner above expressed;



pressed; so that, for the most part, they make three Gatherings in a Year.

Fourthly, as to the Manner of killing the Cochineal: This is commonly done two Ways, either in hot Water, or in Tamascals, which are little Ovens made for that Purpose; tho' there are some People who kill them by roasting them upon Comales, which are flat Stoves with Fire under them, made use of by the Indian Women to bake their Maiz-bread. These three different Methods give the Cochineal three different Colours. The first renders them of a brown Red, the hot Water making them lose the white Colour, with which they are cover'd when alive. The second makes them of an Ash-colour, and marbled, or jasper'd; both upon account of the natural White with which they are cover'd, and the red and transparent Colour of the Cochineal. The third Sort becomes black, as if it had been burnt. Of the old ones, which died after dropping their Young, four Pounds produce but one, when dried; or rather, one Pound is reduced to four Ounces: But three Pounds only of the Living, which have been taken off the Nopals, being kill'd and dried, produce as much.

These Insects are accounted a powerful sudorific, alexipharmic, and antifebrile Medicine, capable of curing all Fevers, however malignant; for which Reason they are frequently exhibited in the Plague, and in petechial Fevers. Dale.

Geoffroy says, that the Cochineal is used in all the same Intentions, with Chermes; and, besides the common Scarlet, is the Basis of that beautiful Colour call'd Carmine, which is used by Painters.

Lemery informs us, it is good for the Stone, for the Gravel, for a Diarrhoea, and to prevent a Miscarriage, being taken in Powder from twelve Grains to half a Dram.

We are inform'd, in the *Philosophical Transactions*, that there grows a Berry (by Report) both in *Bermudas* and *New-England*, call'd the *Summer-Island Reed-weed*; which Berry is as red as the Prickly-pear, giving much the like Tincture; out of which Berry come out first Worms, which afterwards turn into Flies, somewhat bigger than the Cochineal-fly, feeding on the same Berry; in which, we read, there hath been found a Colour, not inferior to that of the Cochineal-fly, and, as to medicinal Virtue, much exceeding it.

COCHLAX, κόχλαξ. A Flint.

COCHLEA.

The *Cochlea* of the *Latins*, and the κόχλα or κοχλία of the *Greeks*, import what, in *English*, we call a *Shell-snail*. Among the *Greeks* it received this Name from the Word κόχλα, to wind or wreath; because this Animal is wreath'd or wrapt up in a Shell of a spiral Form. Without enumerating all the Peculiarities relating to the Natural History of this Animal, we shall only observe, that Shell-snails are divided into those of the Land, and those of the Water Kind. Those of the former Class are again subdivided into Garden and Vineyard Snails; whereas those of the latter Class are distinguish'd into Sea and River Snails. These Animals vary considerably with respect to Bulk, Figure, and Colour. *Swammerdam*, in his *Biblia Naturæ*, informs us, that he had found from Experience, that a Shell-snail was not consumed, as is commonly believed, but only kill'd, by sprinkling Salt upon it; since by that means, in consequence of the strong Contraction of the Muscles, all the Viscera are so powerfully corrugated, that nothing of a distinct Form is to be observed; for all the Mucus is at that time squeez'd out of their Bodies, as he says he himself observed. The spermatie Vessels of this Species of Snail were also render'd a Third less by the Salt: Hence Salt, to him, appears a truly purgative Medicine to the Snail, by which all the Humours of its Body are evacuated. He also thinks it would be expedient to anoint this Animal with various Kinds of purgative Medicines, in order to observe the Effects produced by this means. This Attempt, he is of Opinion, would be of no inconsiderable Service to Medicine. But, waving Topics of this Nature, we shall briefly inquire into the various Uses, to which these Animals have been apply'd, both by the Antients and the Moderns. That Shell-snails, therefore, were by the *Greeks* used as an Aliment, we may learn from *Athenæus*, in *Lib. 2. Cap. 23.* and, that the *Romans* apply'd them to the same Purpose, is obvious from those subterraneous Cavities call'd *Cochlearia*, destin'd for keeping these Animals; of which, according to *Apicius Carlius, de Opsoniis & Condimentis, L. 7. C. 16.* various Dishes were prepared among the *Romans*, after they had been fed or fatten'd in a particular manner. *Pliny*, in the fifty-sixth Chapter of his ninth Book, informs us, that these Animals were fed to such a Bulk by proper Substances, that their Shells were capable of containing *Octo Quadrantes*, as *Salmasius*, in his *Exercitationes Plinianaæ*, will have the Passage read, and not *Octoginta Quadrantes*, according to the common Reading. Now a Quadrans is the fourth Part of a Sextarius, and contains five Ounces, Wine-measure; so that eighty *Quadrantes* amount to twenty Sextarii, which are equivalent to our twenty Pints, according to the Calculation of *Gesner*. Ac-

cording to *Dioscorides*, in *L. 2. C. 9.* "Land Snails, call'd *Operculares*, are beneficial to the Stomach, and not soon corrupted. The Sea Shell-snail is also beneficial to the Stomach, and easily discharged by Stool. The River Snail smells rank. But that Species which adheres to Briers and Bushes, and which is by some call'd *Sciflon*, produces Disorders in the Belly and Stomach, and excites Vomiting. When apply'd raw, with their Integuments, they discuss anasarca Swellings; but they ought not to be removed till all the Humour is evacuated, or drawn out. They afford Ease in arthritic Inflammations. When Splinters are lodg'd in any Part of the Body, they are drawn out by anointing it with Snails. When tritured, and applied by way of Pessary, they provoke the Menfes. Their Flesh, made up into an Ointment, with Frankincense and Myrrh, conglutinates Wounds, especially those of the Nerves. When tritured in Vinegar, they stop Hæmorrhages of the Nose. The Body of a live Shell-snail, especially one of the *African* Kind, if eaten with Vinegar, mitigates Pains of the Stomach. If it is tritured, with its Shell, in Wine and Myrrh, a little of this Wine, drank, removes Pains of the Colon and Bladder. The viscid Juice of the Land Snail, applied to the Hair, makes it lie in any Position in which it is placed. The Shells of all the Species of Snails are of a drying and caustic Nature. They also remove Leprosies, Vitiligos, and Foulness of the Teeth. These Shells, when calcined with their Flesh, and tritured with Honey, make an Ointment for sore Eyes, for Foulness of the Face, for Films of the Eyes, and Dulness of Sight." *Pliny*, in the fourth Chapter of his thirtieth Book, affirms, "That the Ashes of all Shell-snails inspissate and heat by their saponaceous Quality; for which Reason they are used in Caustics, and as an Ointment in the Itch, Leprosy, and Freckles." Pains of the Uvula are also mitigated by anointing the Part affected with the Juice of a Snail, let out with the Point of a Needle. A little after, he subjoins, that Roughness and De-fluxions of the Fauces are mitigated by Snails boil'd in Milk, when the Earth is wash'd from them; after which they are to be bruised, and exhibited for Drink, in that Species of Wine which the Antients call'd *Passum*. The same Author informs us, that Tooth-achs are removed by putting the small Sand, found in the Horns of the Snails, into the Hollows of the Teeth. He also affirms, that these sandy Concretions procure an easy and unpainful Dentition; and that the Ashes of the Shells, with Myrrh, are beneficial to the Gums. He asserts, that the Flesh of the Snail is of Service to the Stomach, if, after a gentle Boiling, it is roasted on the Coals, and exhibited in Wine and Garum; but their rank Smell produces a bad Breath. With *Dioscorides*, he condemns the River and Wood Snails; but commends those found in the Sea, as an excellent Medicine for Pains of the Stomach, if eat alive with Vinegar. He also says, that Shell-snails, without the Shells, bruised in Water, make an excellent Medicine, if drank by such as spit Blood. For alleviating a Cough, he recommends Snails bruised to be drank in three *Cyathi* of moderately warm Water. By boiling unwash'd Snails in Must, (*Protropum*) or in Sea-water, he says, a Decoction is prepared very proper for Use at Meals; and that these Animals, with their Shells, tritured in Must, make an excellent Medicine against a Cough. He also asserts, that Patients afflicted with Deliquiums, Alienations of Mind, and Vertigos, are greatly relieved by drinking Snails, tritured with their Shells, in three Ounces of warm Wine, for nine Days; and that, for this Purpose, some used but one Snail for the first Day, two for the second, three for the third, two for the fourth, and one for the fifth; and that by this means Asthmas, and Inflammations of the Lungs, are render'd more tolerable; as also, that three Snails, tritured with their Shells, and boil'd in Wine, with fifteen Grains of Pepper, are properly exhibited for a Draught to Patients afflicted with Pains of the Loins. The same Author, in *Cap. 7.* informs us, that two Snails, tritured with their Shells, with an Egg, and an Addition of Salt, and two Ounces of Passum, or Palm-juice, or three Ounces of Water, boil'd in a new Vessel, make an excellent Draught for Dysenteric Patients; for which Purpose he also recommends their Ashes to be drank in Wine, with the Addition of a small Quantity of Resin. In the subsequent Chapter he informs us, that three Snails tritured, without their Shells, in an Ounce of Wine, make an excellent Medicine for the Cure of an involuntary Discharge of Urine. The Day following two are only to be used, and the Day after that one. He also recommends the Ashes of the calcin'd Shells for expelling the Stone; and affirms, that the Juice of Snails, extracted by Puncture, removes a *Præcordia Ani*, if the Part affected is anointed with it; that sciatic Pains are alleviated by drinking *Amincan* Wine, in which crude Snails and Pepper are tritured; that, if one of the Testicles hang lower than the other, the Disorder is removed by anointing it with the Froth of Snails; and that broad small Snails, either tritured in Vinegar, or the Ashes of these Animals, cure running Ulcers of the



these Parts; that the Ashes of *African Snails*, calcin'd with their Shells, and drank in some proper Liquor, cure an Hydrocele; that the Ashes of the Shells, mix'd with Wax, contribute to the Discussion of (*Pani*) glandulous Tumors; and that Tumors of the Groins are cured by anointing them with Snails bruised with Honey. In his ninth Chapter he says, 'tis commonly reported, that, by drinking broad Snails, Pains of the Feet and Joints are removed; that, for this Purpose, two of them must be triturated with Wine, and the Snails themselves apply'd to the Part affected, with the Juice of the *Helixine*; but that, for this Purpose, some only triturate them in Vinegar. In the thirteenth Chapter of the same Book he affirms, that Snails bruised, and applied to the Forehead, contribute to stop Hemorrhages from the Nostrils; that, when bruised with their Shells, they are proper for the Cure of spreading Ulcers; that, when triturated with Myrrh and Frankincense, they cure wounded Nerves; that Land Snails, dried in the Sun, and apply'd with Vinegar, are beneficial to Wounds; that, when taken out of their Shells, bruised, and applied, they conglutinate recent Wounds, and put a Stop to spreading Ulcers; that the Species of Shell-snails, which, in Clusters, live upon Leaves, if bruised with their Shells, and applied, extract Splinters, Arrows, or any other such Thing, from the Body; and that such as are eaten are to be used without the Shells; but that they are most efficacious with the Rennet of the Hare. *Pliny*, in the fourteenth Chapter of the same Book, affirms, that Snails, used by way of Aliment, accelerate the Expulsion of the Fœtus; and that they also contribute to Conception, when applied with Saffron. That an Ointment made with Snails, Amylum, and Gum Tragacanth, stops Hemorrhages of the Uterus; that, when used in Aliments, they promote a Discharge of the Lochia; and, in Conjunction with the Marrow of the Stag, correct the Indispositions of the Uterus; whose Flatulences they also discuss, when triturated, without their Shells, with Oil of Roses; but that, for these Purposes, the Shell snails of *Stampalia* are most proper. That two *African Snails*, triturated with as much Fenugreek as can be taken up in three Fingers, with an Addition of four Spoonfuls of Honey, are proper for anointing the Belly; but, for this Purpose, they must be first well anointed with the Juice of Orris. That the long small whitish Shell-snails, which occur every-where, when dry'd in the Sun, reduced to a Powder, and mix'd with an equal Quantity of Bean-meal, prove an excellent Medicine for rendering the Skin white and smooth; and that, by the small broad Shell-snails, mix'd with Polenta, a Species of fine Flour, the Desire of Scratching is removed. In *Lib. 30. Cap. 15.* he also tells us, that the Froth or Mucus of Snails, apply'd by way of Ointment to the Eyes of Children, corrects the Eyelids, and enlarges them when too little; that the Ashes of Snails, prepared with Frankincense and the Whites of Eggs, apply'd by way of Ointment, for thirty Days, to the Part affected, cures Hernias; that the Ashes of their Shells, mix'd with Wax, prevent a Procidencia Ani; but that, with these Ashes, there is a Necessity of mixing the Sanies of the Viper's Brain, let out by Puncture; that the Desire of Venery is check'd by the Excrements of Snails, drank with Oil and Wine; but *Petronius* asserts, that the Necks of Shell-snails prove a powerful Stimulus to Venery. *Pliny* also, in the fifth Chapter of his thirty-second Book, affirms, that the Flesh of River Shell-snails, whether raw or boil'd, is good against the Stings of Scorpions; that, for this Reason, some keep them salted, and apply them to Wounds of any Kind. And, in the tenth Chapter of the same Book, he informs us, that recent River Snails may be used, as an Aliment, for the Cure of Quartan Fevers; that, for this Purpose, some keep them in Salt, and exhibit them triturated in some proper Liquor.

*Hippocrates*, in his Treatise *de Fistulis*, in a *Procidencia Ani*, orders the prolapsed Part to be anointed with the Mucus of Snails, and fomented with a soft Sponge, drench'd in some proper Liquor. According to *Matthiolus ad Dioscoridem*, *Galen*, when treating of the medicinal Use and Virtues of Shell-snails, speaks in the following manner: If the Whole of the Snails are calcin'd with their Shells, and mix'd with unripe Galls, and white Pepper, they are singularly beneficial in Dysenteries, where the Ulcers are not as yet become putrid. 'Tis proper, that, for this Purpose, there should be one Part of Pepper, two of the Galls, and four of the Ashes of the Snails. When these are sufficiently levigated, the Powder is to be sprinkled on Aliments, and exhibited to be drank either in Water, White-wine, or tart Wine; but, without the Admixture of the Galls, the Ashes of the Snails are of a very drying Quality, and somewhat hot, in consequence of the Calcination. Besides, Shell-snails, which have not been calcin'd, if triturated with their Shells, and applied to the Bellies of dropical Patients, and to arthritic Swellings of the Joints, can hardly be removed again, but dry very considerably. They must also be suffer'd to adhere to the Parts, till they fall off spontaneously. They are to be applied in the same manner to Tumors arising from Blows, and which are with Difficulty resolved; as also to

Tumors of the Ears, arising from Contusion; for they greatly dry all these Species of Tumors, tho' a thick and viscid Humour should be deep-seated in them. The Flesh of Shell-snails, first bruised in a Mortar, and afterwards reduced to an equable Softness, powerfully dries Parts abounding with superfluous Humours; for which Reason it is a proper Medicine in dropical Cases. The Juice of these Animals, which, without their Flesh, is call'd by some *μύξα κοχλίου*, that is, the Mucus of the Snail, when mix'd with Aloes, Frankincense, or Myrrh, or with all these together, to the Consistence of a Cerate, is a Medicine of a conglutinating Quality; dries up purulent and mucous Discharges from the Ears; and, when applied to the Forehead, removes Defluxions of the Eyes. Some also use the Whole of these Snails, levigated with their Shells, for extracting Splinters of Wood lodged in any Part of the Body; and others use them, thus prepared, for stopping immoderate Discharges of the Menfes. I myself, says *Galen*, in the Country, once apply'd their Flesh triturated to a Wound, accompanied with Contusion, and an Injury of the Nerve, and the Wound was by that means elegantly conglutinated; but the Patient was a robust and hardy Country Fellow. After they were triturated, I mix'd with them the fine volatile Flour, which adher'd to the Walls of a neighbouring Mill. For this Purpose, a little triturated Resin may be also mix'd up with them. When you intend to procure a large Quantity of the Mucus of these Snails, their Flesh is to be pierced with a Probe; but this must be done a few Days after they are taken, for, in Process of Time, they become dry. And 'tis observed, that recent Snails contain most of this viscid Mucus, which, when pierced, they discharge. *Galen* also, according to *Konigius*, informs us, that, for Abscesses of the Tonfils, Shell-snails are an excellent Medicine, if they are divested of their Shells, torrefied in a Pot, reduced to a Powder, mix'd up with Honey, and applied, by way of Ointment, to the Part affected: And *Avicenna*, in a Hydrocephalus, recommended Snails to be made into a cephalic Decoction, with *Arabian Stœchas* and Calamint. In the same Author we find, that, for this Purpose, some bruise them, and apply them to the Head. According to *Lisler ad Apicium*, *Galen* maintains, that the Flesh of the Shell-snails is of hard and difficult Digestion; but that, when concocted by the Stomach, it is of a highly nutritive Quality. In these Animals the hard Part, call'd *Spondylus*, is to be separated from that Lobe or Cavity, in which the tender Viscera are contain'd. *Galen* also, in his Commentary on the eighteenth Aphorism of the second Section of *Hippocrates*, informs us, that Shell-snails nourish slowly, and by little and little. *Celsus*, in the eighteenth Chapter of his second Book, classes Shell-snails among the Aliments of a highly tender Substance; and, in the twentieth Book of the same Chapter, affirms, that they contain a laudable Juice. We must also observe, that *Horace*, in the fourth Satire of his second Book, asserts, that Shell-snails procure an Appetite after a Debauch. From what has been said, 'tis obvious, that the Antients used Shell-snails against many Disorders of the human Body; that they were persuaded of their conglutinating, drying, refrigerating, and repellent Qualities; and that, for this Reason, they judg'd them proper for correcting Acrimony, and alleviating Pain. They were also convinced, that they were possess'd of a stimulating Quality, render'd the Body soluble, promoted Conception, and expel'd the Fœtus; but that the medicinal Virtues of these Animals differ'd, according to their various Species, the different Methods of preparing them, or the Nature and Qualities of the Ingredients with which they are joined. But they were, in a particular manner, full and explicit upon the abstergent and drying Qualities of calcined Snails, especially their Shells; and asserted, that, in consequence of these Properties, they were effectual in removing Disorders of the Skin. We must also observe, that, before the Days of *Serenus Samonicus*, who flourish'd in the third Century after *Christ*, Shell-snails were not recommended in phthirical Cases.

What are the genuine Virtues of these Animals, and for what Reasons they are beneficial in the above-mention'd Disorders, we shall now endeavour to investigate from what the Moderns have advanced on this Subject. But we must previously observe, that, abstracting from the Shell, which constitutes their particular Genus, these Animals do not differ from other Snails without Shells. With respect to these Animals, *Swammerdam*, in his *Biblia Naturæ*, delivers his Sentiments in the following Words: "Tho', says he, the Snail is classed among the impure Animals, the Use of which, by way of Food, was prohibited to the *Yeros*, (probably on account of their strong Tendency to an alkaline Putrefaction) many Christian Nations use Snails as a Delicacy, tho' every Species of Snails is not apply'd to this Purpose. Tho' in *Holland* there are various Species of Shell-snails, yet I do not know, that any of them are used, except that Species of the Sea Snail called *Alickruyk* (which is our *Periwinkle*). Nor do we eat these at every Season of the Year, but only between *Easter* and *Whitsuntide*, or a few Days longer, at which time Jars of them



“ them are convey’d into the Towns ; and, after boiling them  
 “ with Salt and Water, they are sold out by Measure. Sailors,  
 “ and such as love to create a Thirst by salt Food, are generally  
 “ the Persons who eat these Animals, drawing them from their  
 “ Shells with a Needle, or a Pin; and taking a large Draught of  
 “ Liquor after them. As for my own Part, I don’t much ad-  
 “ mire their Taste, since in the Mouth they seem to be too salt  
 “ and rancid. Their Liver is more sapid, or better tasted,  
 “ than any other Part of their Body. Besides, they are a  
 “ heavy tenacious Aliment, used rather to create Thirst, than  
 “ preserve Health. Their Intestines are also frequently so  
 “ stuffed with Clay or Sand, that they grate upon the Teeth.  
 “ Other Nations, such as the *Italians*, the *Germans*, and the  
 “ *French*, use the Vine-shell-snails, especially after, by a want of  
 “ Food for several Months, they have purg’d themselves from  
 “ their Sordes ; for then, in the Orifice of the Shell, there is  
 “ form’d a certain Covering, as it were, of Clay; which pre-  
 “ vents the Access of Earth, or any other Sordes ; for this  
 “ Species of Snail lies above seven Months without Motion,  
 “ that is, from the Autumn to the Spring, during which time  
 “ they abstain from every kind of Aliment.” *Henricus Mun-*  
*dius*, in his *Opera Physico-medica*, informs us, that among the  
*Italians*, and other Nations of a delicate Turn with respect to  
 Cookery, an Aliment, much esteem’d by the Luxurious, is  
 prepar’d of Shell-snails, dressed with Wine, Aromatics, and  
 Oil ; but that, for this Purpose, the Species call’d *Pomacia* is  
 most proper, especially those produc’d in *Liguria*, and some other  
 Parts. *Aldrovandus* affirms, that, in his time, Shell-snails  
 were eaten at any Season of the Year. He likewise informs us,  
 that some gather them in the Autumn during rainy Weather;  
 and preserve them in a proper Vault strew’d with Bran or Sand,  
 that by this means they may be purg’d. Then the Animals;  
 fixing themselves to the Walls, and other Parts of the Vault,  
 are left in that State during the Winter, and are used as Food  
 in the Spring, and during *Lent*. Then he informs us, that, at  
*Bononia*, they are prepar’d in various Manners, either boil’d  
 with some Broth, in Conjunction with Parsley bruise’d, and  
 season’d with Aromatics, or only fry’d with Oil. The same  
 Author also informs us, that the *Swiss* use Shell-snails as an  
 Aliment ; and that, in *Switzerland*, and other Countries on  
 the same Side of the *Alps*, they are gather’d, and imported into  
*Italy*. *Matthioli* ad *Diosc.* informs us, that in the inland  
 Part of *Italy* Shell-snails are very rarely us’d as an Aliment,  
 but that they are frequently eaten by those who live on the Sea-  
 coasts. *Brayerinus*, in his Treatise *De Re cibaria*, Lib. 3. Cap.  
 51. uses the following Words: “ I am inform’d,” says he,  
 “ that some of my Countrymen in *Brescia* preserve Shell-  
 “ snails in Ditches, as a Delicacy in the Winter-time ; for  
 “ these Animals, in consequence of the Mucus and viscid  
 “ Juice they contain, are capable of being preserved for a  
 “ great while. ’Tis also reported, that they become more  
 “ valuable in proportion as this Juice is exhausted. In *France*  
 “ the small white Shell-snails are most esteem’d, which are  
 “ found in Vineyards and Nurseries. They are principally  
 “ used in the Spring during *Lent* ; but when the Vines begin to  
 “ send forth their Buds, and their Tendrils become turgid,  
 “ they are no longer used by those of a more fashionable and  
 “ delicate Turn. The Method of preparing them is very  
 “ tedious and laborious ; for they wash them three times in cold  
 “ Water, that the Mucus, which, according to *Galen*, the  
 “ *Greeks* call *μύξα*, may be thoroughly taken from them.  
 “ Then they boil them in Water, which they pour out, and  
 “ add fresh Water, boiling them again, in order to soften their  
 “ Flesh, which is very hard. Others fry these Snails in a Pan,  
 “ others bake them in Pyes, which are generally made very  
 “ rich. Among Physicians ’tis agreed upon, that the Flesh of  
 “ these Snails is very heavy, and of difficult Digestion. When  
 “ it is thoroughly concocted, it is, however, highly nutritive;  
 “ but the frequent and liberal Use of it generates black Bile.”  
 In the *Bibl. Angl.* T. 13. we are inform’d, that in *Silesia* Shell-  
 snails are fed for an Aliment, with the Leaves of Plants. In  
 the *Commercium Literarium* for the Year 1739. we are told,  
 that in some Gardens in *Brunswick* there are peculiar Reposito-  
 ries, or deep square Caverns, whose Sides are cover’d with  
 Wood, and over whose Mouths there is a kind of Iron Net,  
 prepared for gathering these Snails during the Summer, when  
 they are fed with Lettuce, in order to be taken out for Use in  
 the Winter. I think most Physicians are agreed, that, for Ali-  
 ments, those Snails are most proper, which are found in Vine-  
 yards and Nurseries, adhering to the Hedges, and Tendrils of the  
 Vines. Those of this Species are call’d *Operculares*, or *Pomatia*,  
*Edules*, *Gastri*, and the *παμαρια* of *Dioscorides*, from *πάμα*,  
*operculum*, a Cover or Lid. But *Matthioli* observes, that Shell-  
 snails, whether black or white, whether large, small, or of an  
 indifferent Size, are all possessed of the same common Nature  
 and Qualities ; and that, if there is any Difference between them,  
 it is the Consequence of the Soil in which they are produc’d and  
 nourish’d ; for those which live in open sunny Places, and feed  
 upon Herbs, are certainly preferable to those found in shaded or  
 marshy Soils ; which may be easily discover’d by the Taste, since

these latter are either insipid, or retain the Relish of the Slime ;  
 whereas the former are better tasted; and more grateful to the  
 Palate: Those also which have fed upon Wormwood yield a  
 grateful Bitter ; whereas those fed upon Mother-of-thyme;  
 Penny-royal, Calamint, Origanum, and other fragrant Herbs;  
 are recommended by their grateful Snell. Among these we  
 may class that Species of Snails, which, being somewhat larger  
 than Lupins, are found in the Fields about *Rome*, where large  
 Clusters of them are in the Autumn observ’d to adhere to the  
 Stalks of certain Thistles. *Swammerdam*, in his *Biblia Naturæ*,  
 has observ’d, that the most proper Season for conveying that  
 Species of Shell-snails call’d *Operculares* from one Place to an-  
 other is in the Winter, since, at that time, they remain shut up  
 in their Shells without Motion, and are observ’d to have the  
 Mouths of their Shells closed up with a kind of Cover. If, on  
 the contrary, they are to be carry’d in the Summer, he says ’tis  
 most expedient to pack them up with some Herbs. If they are  
 intended for present Use, they are to be put into a Bag, and  
 have cut Straw intermixed with them, since, by the Stimulus  
 and Puncture of these, they will be hinder’d from coming out  
 of their Shells. I think it may be affirm’d in general,  
 that Snails may be advantageously used by those for whom a  
 mucilaginous and glutinous Diet is proper, and consequently by  
 those of a robust and hardy Make. But, from this very Cir-  
 cumstance, it may be justly doubted, whether they are proper  
 for phthical, consumptive, and extenuated Patients. *Wel-*  
*schius*, in his *Curationes propriæ*, observes, that they prove pre-  
 judicial in a Phthisis ; and *Lanzoni*, in his *Opera Medico-*  
*physica*, thinks, that Shell-snails are not proper in a Phthisis,  
 because they are concocted with Difficulty, and do not afford  
 a laudable Juice ; and because phthical Patients labour  
 under a Fever, and for that Reason have a small Degree of  
 natural Strength, incapable of digesting Aliments of difficult  
 Concoction. *Sebizius* argues pretty much in the same Strain,  
 and concludes his Reasoning with the following Question :  
 “ How is it possible,” says he, “ that a laudable and salutary  
 “ Nourishment can be convey’d to the human Body by that  
 “ which is of a cold and viscid Nature, which lives under the  
 “ Earth, and on its Surface, in dark and marshy Places, and  
 “ which is of itself often nourished with noxious Aliments ?”  
 The Force of this Reasoning *Boeclerus* attempts to invalidate  
 in the following Words: “ Ducks and Geese live in marshy  
 “ Places, and are often nourished upon Substances of a hurtful  
 “ Nature, in consequence of which they cannot, according to  
 “ this Reasoning, afford a laudable and salutary Nourishment.  
 “ ’Tis, indeed, certain, that these Animals, when ill prepar’d,  
 “ or us’d in two large Quantities, may prove prejudicial ; but  
 “ it does not from this follow, that they are not at all to be  
 “ us’d ; but it frequently happens, that Physicians commend or  
 “ condemn to others what they themselves like or dislike.”  
*Rolfincius*, in his *Ordo & Methodus Medicinæ*, affirms, “ that  
 “ a frequent Use of the Shell-snails, gather’d in Vineyards,  
 “ and prepar’d in Flesh-broths, is beneficial to Patients labour-  
 “ ing under Heëtic Fevers ; and that they afford an Aliment of  
 “ easy Digestion, somewhat cold, moistening, and solid.”  
 According to *Semertus*, heëtic and extenuated Patients are not  
 absolutely to be forbid the Use of Shell-snails, but only of their  
 Flesh, because it is of difficult Digestion, and consequently re-  
 quires a strong Stomach ; for which Reason it is necessary it  
 should be long boil’d, and prepar’d with various Sauces ; but, in  
 whatever manner it is cook’d, it continues to be of difficult  
 Digestion, generates a thick and black Blood, and creates Ob-  
 structions. But what is said to be principally beneficial to heëtic  
 Patients is, the Broth of these Snails, not of the first, but of  
 the second Boiling ; because, by long Boiling, a large Quantity  
 of the glutinous and alimentary Substance is extracted. There  
 is also in the posterior Part of these Snails, which, according to  
 some, *Aristotle*, in his *Historia Animal.* Lib. 4. Cap. 4. call’d  
*μύκων*, a certain glutinous Substance, of a somewhat  
 hard cheese-like Consistence, easily dissolvable, soon yield-  
 ing to the Teeth, concocted with Easo, and highly nutritive.  
 This Part is, therefore, to be chosen for the Use of heëtic Pa-  
 tients, or their Broth alone is to be exhibited, because it is  
 friendly to the Stomach, Pains of which it is also said to re-  
 move. But no small Care is to be used in the Choice of these  
 Snails ; for they frequently adhere to, and feed upon, loathsome,  
 corrupted, and poisonous Substances, such as Funguses, Ser-  
 pents, putrid Bodies, and poisonous Herbs, in consequence of  
 which it has been observ’d, that some have died by eating these  
 Snails. Hence *Cardan* pronounces the Man a Fool, who rashly  
 exposes himself to so considerable a Danger. But, if we are  
 resolv’d to eat them, he advises, that they should be fed for fif-  
 teen Days in a Pot ; that they should be often shifted from one  
 Place to another ; and, above all things, that they should be  
 gather’d in clean Places. *Sir Theodore Mayerne*, in his *Opera*  
*Medica*, has the following Particulars relating to the Use of  
 these Animals. According to *Matthioli*, Wood-snails, well  
 cleansed from their native Mucus, and boil’d in new Milk,  
 with Colts-foot, are successfully used as an Aliment by con-  
 sumptive Patients. The Flesh of these Animals, freed from  
 their



their Shells and Excrements, washed with Water, and wrapt up in several Folds of Linen, are to be bury'd for two Hours in hot Horse-dung; when they are taken thence, they are to be wash'd with some warm Liquor, and boil'd in Broth prepar'd with Pullets. When thus prepar'd, they afford singular Relief to consumptive and extenuated Patients. But they may, with still greater Advantage, be prepar'd in the following Manner:

Take fifty large Shell-snails: After washing them sufficiently, boil them with Water in their Shells, along with Barley stript of its Husks, till the Barley breaks: Then, taking them out of their Shells, boil them a second time, in Capon-broth, till they are sufficiently tender. Strain the Broth thro' a clean Linen Cloth, and every Morning and Evening exhibit six Ounces of it, edulcorated with one Ounce of Sugar, three Hours before Breakfast and Supper.

Another Method of preparing them is this:

Take of Snails, divested of their Shells, two Pounds; of fresh Liquorice-root, one Pound; of Marshmallow-root, four Ounces: After cutting all these small, distil them from a Glass Alembic, plac'd in a Bath Heat. Four Ounces of this Water, edulcorated with one Ounce of Sugar, are every Morning to be exhibited to consumptive Patients.

*Johannes Junckerus*, in his *Conspectus Therapiae generalis*, informs us, that, for the Use of consumptive, hectic, and phthical Patients, those Shell-snails are accounted most proper, which, for some time before, have been fed upon Sugar and Meal; but, because they are with Difficulty concocted, they excite a Loathing in most Persons, and afford no very considerable Relief, he thinks, that their Jellies are preferable to them. But *Ettmuller* affirms, that all Shell-snails afford a Jelly impregnated with a large Quantity of a highly mild volatile Salt, like that contained in refrigerating Plants: He also asserts, that Shell-snails are possessed of a moistening Quality, and are not of very difficult Digestion. Hence he concludes, that they are highly proper in hectic Cases, when prepar'd after the manner of a certain *Italian*, whose only Remedy, in Disorders of this Kind, were Mountain Shell-snails, prepared in the following Manner: For some Days they were fed only with Sugar and Meal: Two or three Days after they were gently boiled with Water and a little Vinegar, and afterwards in rich Broth, prepared with Fowls or Mutton. *Boecklerus* positively affirms, that he himself, when so extenuated, that his Skin adhered in a manner to his Bones, was happily restored by the Broth of Shell-snails, and by Jelly of Oatmeal. See *GELATINA*. The Method of preparing this Broth he directs in the following Manner:

Take the mucous Part of eight or ten Snails, well boil'd, and two or three River-crabs, with their Heads cut off, and their Intestines taken out. After these are cut and bruised, let them be boil'd in Flesh-broth, till the Broth assumes a redish Colour. Then strain the Broth, and boil it a second time. Then add, of Scurvy-grass, and Water-cresses, each two or three Pugils; and take the Vessel off the Fire, covering it well up. In the mean time dissolve the Yolk of an Egg in a sufficient Quantity of some other Broth; and, when the former Broth is so cold, that it may be drank, mix both Broths together, adding Salt, Butter, or Mace, at Pleasure. This Liquor is to be drank for some Weeks, on an empty Stomach.

Other Instances of phthical Patients cur'd, and render'd fat, by the Use of Shell-snails, may be seen in *Eph. Nat. Curios. Decad. 2. a. b.* It is not to be doubted, but Shell-snails, when boil'd, afford a Substance capable of nourishing the human Body; but, at the same time, it cannot be deny'd, that their viscid and glutinous Nature renders them somewhat difficult to be digested. I am, however, persuaded, that, when diluted in other Liquors, they are easily digested, and contribute powerfully to obtund and correct the Acrimony of the Humours. Whoever reflects upon this correcting Quality of Snails, join'd to their glutinous Nature, by which they block up the Pores, will be easily able to determine, in what particular Cases and Disorders the Use of them is to be recommended. If by the Use of Shell-snails different Effects from these are produc'd, they are to be accounted for from the particular Constitution of the Patient, which, perhaps, cannot bear glutinous Substances; or from the Things on which the Snails have been previously nourish'd and fed. To these I shall subjoin a Remedy, prepar'd from Shell-snails, against the Stone of the Kidneys and Bladder, and, by the learned *Bryckmannus*, describ'd in the following Words: "Garden Snails, gather'd from their Holes in the Ground, in the Winter-time, when they sleep securely, and are defended from the Cold by their white and chalk-like Shells, are to be strongly calcin'd, for two Hours at least, in a new Earthen Vessel, cover'd and luted, by means of a rotatory Fire. When they are cold, they are either to be triturated in a Mortar, or, by Levigation on a Marble, re-

duc'd to a Powder of a cineritious blackish Colour, which is to be pass'd thro' a Hair Sieve, in order to alleviate nephritic Pains, and expel the Stone. During the Paroxysm, half a Dram of this Powder is to be exhibited every four Hours in Water, either with or without *Sal Prunellæ*, till the Pain ceases; the Patient, in the mean time, drinking a proper Quantity of the Oil of sweet Almonds after every Dose. With a preservative Intention the Patient is, about the Full of the Moon, every Month, to take three Doses of the Powder at Bed-time, either in simple or distil'd Parsley-water; and this Method is to be persisted in for a Year. During a twenty Years Course of Practice, I have, with uncommon Success, exhibited this Powder to large Numbers of Patients labouring under nephritic Disorders. This Medicine is of an earthy and alkaline Nature, as a great many others of the lithontriptic Kind are." 'Tis observable, that this is one of *Mrs. Stevens's* Ingredients. *Wagnerus*, in *Eph. Nat. Curios. Decad. 2. a. 10. o. 110.* informs us, that large Snails, well triturated with their Shells, render'd hot in any Vessel over the Fire, spread on a Linen Cloth, and frequently apply'd by way of Cataplasm, are an excellent Remedy in arthritic Pains, arising from a Defluxion of acrid Humours. Some also, according to *Ettmuller*, from Snails, previously well wash'd, distil, in *Balneo Mariæ*, a Phlegm or Water, calculated not only for diuretic, but also for cosmetic Purposes; such as removing Disorders of the Skin, Hands, and Face: But, in his Opinion, the Liquor obtain'd from these Animals, per *Deliquium*, is justly preferable to the distil'd Water. *Schroder* is also of Opinion, that the distil'd Water is excel'd either by the Liquor flowing spontaneously from Shell-snails, upon their being prick'd with a Needle, or by that excellent cosmetic Liquor into which they are colliquated, when they are bruis'd, and common Salt, or rather Salt of Tartar, is sprinkled upon them in a cool Place; for both these Liquors are impregnated with a moderately oleous and volatile Salt, in consequence of which they prove excellent anodyne and refrigerating Medicines in preternatural Heats, and Pains arising from an acid or a viscid Cause; but they are, in a particular manner, beneficial in the Gout. *Joannes Heurnius*, in *T. 1.* informs us, that eight Ounces of the distil'd Water may be exhibited in Cases where the Strength is much impair'd and exhausted. And *Forestus*, in his *Observ. Medicinal. Lib. 16. Obs. 58.* tells us, that, by a Spoonful of the Water distil'd from young Snails, gather'd in Vineyards before the Rising of the Sun, and now-and-then exhibited with the Yolks of two Eggs, he knew a certain Monk, so extenuated as to be a truly venerable Spectacle of Mortification, render'd fat, and restor'd beyond Expectation, in a few Months. With respect to the external Use of this Water, *Juncker* advises Practitioners to take care, lest the Use of it should prove prejudicial to their Patients by a sudden Repulsion of any recrementitious Matter from the Surface of the Body. But, with respect to the common distil'd Water of Shell-snails, *Hoffman*, in his *Clavis Schroderiana*, justly observes, that these Animals, in Distillation, yield none of their Virtues; whereas, when they are boil'd, they deposit in the Liquor that Mucilage, in which their glutinous and nutritive Virtue is lodged. According to *Hoffman*, (*ad Poterium*) the Shells of the Snails, calcin'd to a very white Calx, are an excellent antinephritic Medicine: And the same Author, in his *Dissertatio de Remediorum Domesticorum Præstantia*, affirms, that, as a Preservative against the Stone, he found no Medicine more effectual than the Powder of Snails, exhibited frequently every Week. The learned *Adolphus* thinks, that between half a Dram and a Dram of the fine Powder of Snail-shells, frequently exhibited in a proper Vehicle, is preferable to most other antinephritic Medicines, because it powerfully dissolves the Gravel, and gritty Matter, of which the Stones are form'd, since, by the Use of it, large Quantities of Sand are evacuated with the Urine. But, in all Probability, this Powder is not possess'd of greater Virtues than other Substances of an equally absorbent Nature. The white Opercula or Covers of Land Snails, well wash'd, and reduc'd to a Powder, are, by *Ettmuller*, recommended for carrying off a Dropsy by a plentiful Discharge of Urine, if, every Morning and Evening, the Patient takes as much of the Powder as may be held on the Point of a Knife, in a proper Vehicle. The same Author observes, that others dissolve these Opercula or Covers in Spirit of Salt, coagulate them by drawing off the Menstruum, and, per *Deliquium*, reduce them to a Liquor, which, he says, is a powerful Diuretic in Dropsies; and if, instead of the Spirit of Salt, this Solution is made in four Wine or Vinegar, he asserts, that the Liquor will be possess'd of the same Virtues. These Covers are, of all other Parts of the Snail, most easily obtain'd, because the Snails, spontaneously breaking thro' them every Spring, remove them. They are recommended in Suppressions of Urine; and, when mix'd with a little Nitre, highly extol'd as an Arcanum in the Stone. Some also add Crabs-eyes, the Kernels of Peach-stones, or the Raspings of Boars Teeth. In practical Authors, various Instances occur of Patients who have discharg'd Shell-snails, of different Kinds, both by Vomit and Stool.

There



There are various Sorts of Snails taken notice of; and describ'd, by Naturalists; but we shall only briefly mention those to which we find any Medicinal Virtues ascrib'd, such as the COCHLEA NUDA. See LIMAX.

COCHLEA OLEARIA: This Animal receives the Epithet *Olearia*, because, according to *Pliny*; in *L. 32. Cap. 11*; its Shell, from its commodious Figure, was used by way of Oil Crewet; perhaps also because it was esteem'd of some Efficacy against Poisons.

COCHLEA TERRESTRIS, LIMAX TERRESTRIS, Offic. *Cochlea testacea*, Schrod. 5. 283. *Cochlea cinerea, maxima, edulis, cujus os operculo crasso, velut Gypseo; per hyemem clauditur*, List. Hist. Animal: Angl. 111. *Cochlea cinereo rufescens fasciata, leviter umbellata*, Ejusd. Hist. Conch. 1. n. 46. *Cochlea Pomatia edulis Gesneri*, Ejusd. Exer: Anatom. 1. *Pomatia*, Gesn. de Aquat. 255. *Cochlea terrestris Gypseo operculo obferata*, Aldrov. de Exang. 389. THE SNAIL.

These are the Snails commonly used in Food and Medicine.

COCHLEA CÆLATA, Aldrov. de Exang. 393. Jonst. de Exang. Tab. 12. Gesn. de Aquat. 240. Rondel. de Pisc. 2. 98. Charlt. Exer. 62. *Cochlea cæolata antonomastice dicta*, Bonan. 114. Tab. 11. n. 11, 12, 13. *Cochlea Trochiformis striata, rugosa, papillosa, &c.* Lanz: Meth. Test. 51.

This is a Species of Shell-snail found in the *Mediterranean* Sea. Its Operculum or Cover is, according to some, the *Umbilicus Marinus* of the Shops. See UMBILICUS MARINUS.

COCHLEA MINOR EX LUTEO ET NIGRO VARIATA, Ind. Med. *An Cochlea interdum unicolor, interdum variegata, &c.* List. Hist. Conch. 1. n. 54. THE PARIS GARDEN SNAIL.

These are us'd in Collyria. Dale.

COCHLEA AQUATICA, Offic. *Cochlea fusca, fasciis crebris angustisque prædita*, List. Hist. Animal. Ang. 162. *Cochlea nigricans, dense & leviter striata*, Ejusd. Hist. Conch. 4. Sect. 5. n. 43. THE WATER SNAIL; OR PERIWINKLE.

COCHLEA Purpurifera is the *Murex*. Purple-fish.

COCHLEA Sarmatica. A very large Snail found in the Baltic Sea, mention'd by *Aldrovandus* and *Johnson*. *Rieger* says, it is as large as a (*Dolium*) Hogthead, with Horns as big as those of a Stag. I do not find, that it is us'd, either in Physic, or as an Aliment.

COCHLEA Cærulea. A Sea-shell, esteem'd only for its beautiful Colour.

COCHLEA Margaritifera. See CONCHA MARGARITIFERA.

The Shells of all these, when calcin'd, become Lime.

COCHLEA Fossilis, vel Lapidea. See COCHLITA.

COCHLEAR, COCHLEARE, COCHLEARIUM, *κοχλιδεον*. A Spoon, thus call'd, perhaps, from its Resemblance to a sort of Shell.

In medicinal Authors, it imports a Measure, both for liquid and dry Substances. *Rieger* says, the *Attic κοχλιδεον* was the fourth Part of the Cyathus, containing four Scruples and two-fifths of a Grain; and that the *Roman Cochleare* was the same. According to *Eisenschmidius* and *Galen*, it was only one-tenth of a Cyathus. *Monardus* shews, that, in *Dioscorides* and *Pliny*, a Cochleare is not so much as a Dram; and that, in *Galen*, mention is made of two Sorts of Cochlearia, the lesser and the greater. *Sennertus* is of Opinion, that the Cochleare was of four Sorts, the least, the small, the greater, and the greatest; so that the least was half a Dram; the small one a Dram; the greater a Dram and a half, or two Drams; and the greatest half an Ounce. *Arbuthnot* informs us, that a Cochleare was half a Chema, which is the sixtieth Part of an *Attic Xestes*, or *Roman Sextarius*. By this way of calculating, a Cochleare was one-tenth of a Cyathus.

In the *London* and *Edinburgh* Dispensatory, a Cochleare is defin'd in Syrups half an Ounce; in distil'd Waters three Drams.

COCHLEARIA.

The Characters are,

The Fruit is almost globous; the Seeds are round.

*Boerhaave* mentions six Species of this Plant, which are,

1. Cochlearia; folio Cubitali. *Tourn. Inst.* 215. *Elem. Bot.* 184. *Boerb. Ind. a. 2. 10. Dill. Cat. Giff.* 66. *Buxb.* 77. *Raphanus sylvestris*, Offic. *Raphanus rusticus*, Cod. Med. 96. *Ger.* 187. *Emac.* 241. *Park. Theat.* 860. *C. B. Pin.* 96. *Raii Hist.* 1. 818. *Synop.* 3. 301. *Merc. Bot.* 1. 64. *Phyt. Brit.* 103. *Mer. Pin.* 102. *Hist. Oxon.* 2. 237. *Raphanus sylvestris, seu Armoracia multis*, *J. B.* 2. 851. *Raphanus sylvestris Armoracia*, *Chab.* 474. *Armoracia Rivini*, *Rupp. Flor. Jen.* 74. HORSE-RADISH. Dale.

The Roots of this are a Finger thick, and more long, sinking deep in the Earth, of a white Colour, and of a hot, biting Taste, and of a volatile, pungent Smell. It has many long, large, undivided Leaves, indented about the Edges, of a dark-green Colour. The Stalks arise not very high, having a few, long, narrow Leaves, and slender Spikes of small, white, four-leav'd Flowers, succeeded by little, round-pointed Seed-vessels,

which seldom bring ripe Seed. It grows wild in several Places near River-sides, and is planted in Gardens for the Root's sake; which is only used.

It is heating, drying; and aperitive, frequently us'd in Sauces, to create an Appetite. It is of great Use against the Scurvy, Dropsy, and Jaundice, and is often put into Diet-drinks for those Purposes. *Miller's Bot. Off.*

The only Medicine, deriving its Name from this Plant, is the *Aqua Raphani Composita*. See AQUA.

When this Plant is calcin'd, very little or no Salts can be extracted from the Ashes, these being naturally volatile.

The expressed Juice, being suffered to putrify, affords an alkaline volatile Salt, as does Urine; which is the Reason why it is so highly beneficial in the acid Scurvy. In the other kind of Scurvy, it is very pernicious; in which Case I have known it to procure a Rupture of the Liver. But where there is a Defect of Heat, and a Coldness and Viscidity of the Juices, it is very proper. In a Scurvy attended with a hot Fever, and a Putridness, it would destroy the Patient. So also in a Dropsy, if it proceeds from a cold Cause, this Plant is proper to be used, otherwise not. I have seen bloody Stools and Urine procur'd by an unseasonable Use of it. A Maid in this City (*Leiden*) was afflicted with a hot Scurvy; by taking this Herb, she fell into a continual Bleeding at the Nose, from which she was afterwards freed by the Use of *Acetosæ*. The Root, taken in a large Quantity, excites Vomiting. Bruised small, and drank to the Quantity of two Ounces, it is good for those, who are afflicted with a pituitous Stomach; and, if this be attended with Vomiting, it will be proper to drink plentifully of warm Water, after taking the Dose. The Herb, in Conjunction with *Acetosæ*, makes an excellent antiscorbutic Medicine; otherwise, where its Acrimony is to be feared, it is to be temper'd with Milk, Whey, or Raisins. It is used for Gargarisms in Putrefactions of the Gums, and yields a noble Spirit and Tincture. *Boerb. Hist. Plant. p.* 419.

This Plant is frequently used in stimulating Cataplasms, together with Mustard-seed, old Yeast, and Vinegar.

2. Cochlearia; hederæ folio. *M. H.* 2. 308. *Hederaceum Thlaspi.* *J. B.* 2. 933. *Lob. Ic.* 615. *Obs.* 338. a.

3. Cochlearia; folio subrotundo. *C. B. P.* 110. *Tourn. Inst.* 215. *Elem. Bot.* 184. *Boerb. Ind. a. 2. 10. Rupp. Flor. Jen.* 67. *Buxb.* 76. *Cochlearia Batava, rotundifolia, hortensis*, Offic. *Cochlearia*, *J. B.* 2. 942. *Chab.* 297. *Raii Hist.* 1. 822. *Synop.* 3. 302. *Merc. Pin.* 27. *Cochlearia rotundifolia*, *Ger.* 324. *Emac.* 401. *Cochlearia major rotundifolia, frut Batavorum*, *Park. Theat.* 285. *Cochlearia major Batavica subrotundo folio*, *Hist. Oxon.* 2. 308. *Cochlearia rotundifolia, frut Batava*, *Merc. Bot.* 2. 19. *Phyt. Brit.* 29. GARDEN SCURVY-GRASS.

The Root of this Scurvy-grass is somewhat long, and full of Fibres, from which spring a great Number of flatish succulent green Leaves, on long Foot-stalks, which are round, and appearing somewhat hollow, like a Spoon; whence it has its Name *Cochlearia*. The Stalks grow to be eight or nine Inches high, brittle, and cloath'd with the like Leaves, which are more angular and pointed. The Flowers grow in Tufts on the Top of the Stalks, consisting of four small white Leaves, which are succeeded by little, round, swelling Seed-vessels, parted in the Middle by a thin Film, and containing small round Seeds. Both Leaves and Flowers have a biting, hot Taste. It grows wild in several Parts of the North of *England* by the Sea-side; but is very much cultivated in Gardens, and flowers in *April*.

*Scurvy-grass* abounds with fine volatile Parts; and therefore the Herb infused, or the Juice expressed, is more prevalent than a Decoction, the volatile Parts flying away in the boiling. This is accounted a specific Remedy against the Scurvy, cleansing and purifying the Juices of the Body from the bad Effects of that Distemper, and clearing the Skin from Scabs, Pimples, and foul Eruptions.

Official Preparations are the simple Water, the Spirit, and a Conserve. *Miller's Bot. Off.*

It must be remembered, that these warm alcalescent Plants are only proper in an acid Scurvy; but that, in a putrid alkaline Scurvy, they are Poisons, as is remarked under the first Species of Cochlearia.

4. Cochlearia; major; Batavica; erecta; folio oblongo, *H. L.* 165. a,

5. Cochlearia; folio sinuato, *C. B. P.* 110. *Raii Hist.* 1. 833. *Synop.* 3. 305. *Tourn. Inst.* 215. *Elem. Bot.* 184. *Boerb. Ind. a. 2. 10. Cochlearia Britannica marina*, Offic. *Cochlearia Britannica*, *Ger.* 324. *Emac.* 401. *Cochlearia Britannica folio sinuato*, *Hist. Oxon.* 2. 308. *Cochlearia vulgaris*, *Park. Theat.* 285. *Mer. Pin.* 27. *Cochlearia vulgaris longo & sinuato folio*, *Merc. Bot.* 1. 29. *Phyt. Brit.* 29. SEA SCURVY-GRASS.

This Sort of *Scurvy-grass* grows to be about as high as the Garden Scurvy-grass; but the Leaves are rather thicker, longer, narrower, and more pointed at the Ends, frequently sinuated about the Edges, of a duller green Colour than the Garden. The Flowers and Seeds are alike in both. It has a saltier Taste,

not



not high so hot and pungent as that. It grows in salt Marshes, and particularly by the *Thames* Side, all the Way below *Woolwich*, flowering rather later than the Garden-kind.

The *Sea Scurvy-grass* is frequently used in scorbutic Remedies along with the Garden sort; but, wanting its fine volatile Parts, it seems not so prevalent, but, abounding more in saline Particles, it may be used, to good Purpose, as a Diuretic. *Milner's Bot. Off.*

6. Cochlearia; minima; ex montibus Walliz, *Sher. a.*  
THE LEAST SCURVY-GRASS FROM THE WELSH MOUNTAINS.

COCHLEATA. See MEDICA.

COCHLIA, or COCHLIAS. See COCHLEA.

COCHLIAXON, *κοχλιδίων*. A Name for a Part in a Machine describ'd by *Oribasius*, in his Book *De Machinamentis*, C. 24. which he calls *Glossocomum Nymphodori*.

COCHLIDIUM, *κοχλιδιον*, the same with *κόχλις*. A small Shell-snail, whose Shell, according to *Bregnius*, is of a conical, and regularly spiral Form. This Author, in his *Dissertatio Physica de Polytholamiis*, enumerates various Species of the Cochlidium.

COCHLITA. This is also call'd Cochlea fossilis, or lapidea. It is a Stone of the Shape and Figure of a certain Shell-snail.

This is said to be possessed of some lithontriptic Virtue.

COCHONE, *κοχών*. *Galen* explains this the Juncture of the Ischium near the Seat or Breech; whence, says he, all the adjacent Parts about the Seat are call'd by the same Name. *Hippocrates* represents these Parts, in his first Book *De Morbis Mulierum*, as subject to Pains in certain Irregularities of the menstrual Flux, which he there describes, when they grow inveterate; and, in the second Book, he also mentions Pains of these Parts in certain uterine Disorders; and, in the fifth Book of his Epidemics, he relates the Case of *Eupolemus*, who was afflicted with Pains in the right Coxendix, the Groin, and the Juncture of the Ischium, which is at the fore Part of the Ischium with the Inguen, I suppose he means the Os Pubis. These Pains, he informs us, terminated in a Suppuration about the Ischium, Inguen, and Cochone, and at last prov'd fatal. *Hesychius* says, *Cochone* is the Part of the Spine, which is adjacent to the Os Sacrum and Breech; and tells us, that some call the Parts on both Sides the Os Sacrum by this Name; and adds, that the Ischia are thus nam'd.

COCILIO. The Weight of eleven Ounces. *Rulandus*.

COCOLATA. Chocolate.

COCOMICA SIGNA. A Term used by *Paracelsus* in his Treatise *De Podagricis*, L. 2. It is no easy matter to discover his precise Meaning. He seems to be speaking of what we usually call Blasts, which, he says, reside in half the Middle of the Sky (*Cæli*), and descend upon Herbs, Leaves, Trees, and the like: And in the same manner, says he, either with or without the Dew, many Figures, Forms, and *Cocomic Signs*, are found, which frequently fall upon Men whilst walking in the Line of their Direction.

COCOS. See PALMA, INDICA, COCCIGERA, ANGULOSA.

COCTIO. The *Coctio* of the *Latins*, and the *πέψις* of the *Greeks*, imports what, in *English*, we call Boiling, which is heating any Liquor over a Fire to such a Degree, that Bubbles arise in it. This Process is a Species of strong and powerful Digestion; for which Reason *Junker*, in his *Conspectus Chymicæ Theoretico-præcticæ*, informs us, that, among the ancient Chymists, the Word *Coctio* was frequently used instead of *Digestio*, and convey'd the same Idea. Chymists and Apothecaries boil several Bodies furnished by the mineral, the vegetable, and the animal Kingdoms, in different Liquors, with various Views, for preparing Extracts, Essences, and what we call medicated Decoctions, that, by this means, the Virtues of these Bodies may be transfused into the respective Liquors in which they are boil'd. *Coctio* or Boiling is also used for depurating some Substances from their Sordes; for inspissating Juices; for qualifying Preserves for a longer Continuance in the State they are delir'd; for correcting and mitigating the drastic Virtues of some Substances; and for removing the stultent Qualities of some Aliments and Medicines. *Oribasius*, in his *Medicinal Collection* from *Galen*, gives us the following beautiful Account of Coction or boiling with Water: "Any solid Substance, says he, when boil'd in Water, deposits in that Fluid the primary Qualities, of which it was possessed; by which means it is divested of every Quality, and assumes an insipid Nature; nor does it retain any thing of a saline, bitter, or astringent Taste." If bitter Substances are twice or thrice boil'd, they evidently deposit their Bitterness in the Water, and become like those Substances, which are said to be destitute of Qualities. Acrid Substances, in like manner, when boil'd, deposit their Acrimony in the Water used for that Purpose. The same also holds true with respect to astringent Substances.

Various Liquors are used, and different Portions of Time allotted, for Coction, according to the different Intentions of Operators, or the particular Natures of the Substances to be boil'd;

so that nothing general can be determin'd with respect to this, the Observation of which would be of universal Use to the Operator; but we are to judge of the Manner, in which particular Substances are to be boil'd, from a Knowledge of the respective Natures of the Bodies to be subjected to this Operation. I think, it is sufficiently obvious, from the penetrating and powerful Action of the Fire, and from the pervading and resolvent Virtues of the Liquors added, that, if Bodies are of such a Nature as to be penetrable by the Liquor, they are, by Coction, considerably chang'd, and, in a particular Manner, divested of those Qualities, which depend upon their volatile Parts, which are more or less lodg'd in the Menstruum, in which the Coction or Boiling is perform'd, in proportion as they are restrain'd and kept from flying off by the Vessel's being closely covered, or the reverse. But the longer the Coction of any Liquor is protracted in an open Vessel, without an Effusion of fresh Liquor, the more inspissated it must be, in consequence of the Dissipation of its more fluid and volatile Parts. Hence it is obvious, that, according to *Boerhaave*, in his *Chymistry*, Vol. 2. the Fermentation of fermentable Juices may be destroy'd by Coction or Boiling. With respect to that particular Species of Coction called *Affatio*, see the Article ASSATIO.

Vegetables, by boiling, lose their native Waters, their volatile essential Oil, wherein their distinguishing Spirit resides, and a Portion of the Acid they originally contain'd. There remain their Earth, a Portion of fix'd Oil, and the Salts.

The Coction of the Aliments in the Stomach is their Digestion, or Reduction to a sort of Emulsion or Chyle.

By the Coction of the Humours, the Writers of Institutes mean, the Reduction of the Chyle to Blood, which is call'd the second Coction; and also the Separation of any Fluid from the Blood, by means of Glands destin'd to this Use, which is call'd the third Coction.

It is commonly said, that the Faults arising from any Defect in the first Coction, are not mended in the second, nor those from the second by the third; that is, when the Aliment is not sufficiently comminuted in the Organs of Digestion, the Particles of the Chyle are not small enough to circulate regularly through the minute Vessels of the Lungs, and be converted into good Blood, it being not possible for the Organs of Sanguification to dissolve farther the Particles they receive from the Stomach. Hence, these Particles being too large to circulate thro' the Capillary Arteries, Obstructions, and all their Consequences. And the third Coction, that is, in the Glands, is not better adapted to the farther Dissolution of these Particles, than the second.

The Coction of the morbid Matter, or the Matter which forms a Disease, is its Reduction, either spontaneously, by the vital Powers, or the Force of Medicines, to a natural and healthy State, so that it may be no longer offensive; or the preparing it for Expulsion out of the Body, by a salutary Crisis. See CATHARTICA. And, when this is accomplished, the Disease ceases, or, at least, is much diminished, together with all its Symptoms; the Strength and Firmness of the vital Powers increase; the injured Functions are restored to their natural Vigour; and the circulating Humours, Secretions, Excretions, and Excrements, which are alter'd by the Disease, now put on a natural and healthful Appearance. The sooner this Coction is brought about, and the more perfectly, the less dangerous is the Disease, and *vice versa*.

The Remedies proper to promote this Coction, and a subsequent Crisis, are such as attenuate the inspissated Juices; obtund and destroy Acrimony; open the obstructed Vessels; strengthen the lax Fibres; relax those which are too rigid; and moderate the Motion of the Blood: And, on Medicines suited to these Intentions, the Cure of all Distempers, whether acute or chronical, depends.

CODAGA-PALA, H. M. *Arbor Malabarica lactescens, Jasmini flore odoro, siliquis oblongis*. D. Syen.

A Tree which grows in *Malabar*. The Bark of the Trunk and Root, powder'd, and drank in sour Milk, put a Stop to any Flux of the Belly, and to the Hæmorrhoids. The Root powder'd, and boil'd in Water wherein Rice has been wash'd, makes an excellent Fomentation for the tumefy'd Part in a Quinsy, or for any other Tumors, and for the Gout: It also cures the Tooth-ach, if held in the Mouth; and also kills Worms. *Raii Hist. Plant.*

CODAGEN. See *Hydrocotyle*; *Zeilanica*; *Asari folio*.

CODDAM-PULLI. See CARCAPULI.

CODDA-PANNA. See *Palma montana, folio plicatili, flabelliformi, maximo; semel tantum frugifera*.

CODESELLA. A Carbuncle. *Forestus*.

CODIA, *κωδία, κωδία, or κωδία*, in *Hippocrates*, import a Poppy-head. *Galen*. *Hesychius*. The Heads of other Plants are also call'd by this Name.

CODI-AVANACU, H. M. *An Lathyrus fruticescens, fructu in foliorum alis echinato?*

This is an Under-shrub, which grows in sandy Soils in the *East Indies*. The Juice of the whole Plant, taken in Wine, is a good Remedy for Fluxes. This Juice also, boil'd with Oil, is exhibited as a Restorative in case of Weakness. The Oil procured



procured from the whole Plant, makes a good Embrocation for the Head, in order to remove a Vertigo.

**CODOSCELLÆ.** Buboos. *Fallopis.*

**CÆLA,** καῖλα. The Cavities or Hollows, as they are call'd, of the Eyes. These are two, one immediately above the superior Eyelid, which is properly call'd καῖλον the other immediately under the inferior Eyelid, call'd ὑπόκαλον. These are subject to swell, and be fill'd up, in a Cachexia, Oedema, or any bad Habit of Body.

The καῖλα of the Feet are the hollow Parts at the Bottom of the Foot, adjacent to the Heels.

**COELESTINUS** Color, in *Paracelsus*, is a sky Colour. He informs us, that a Circle of this Colour, in the Urine of Women, is a Sign of a leprous Putrefaction in the Matrix; and that a Bubble of this Colour, on the Urine, is a Sign of a Leprosy, or sometimes of an Alopecia.

**COELIA,** κοιλία, or κοιλίη. This has many different Significations. For, first, it imports a Cavity in any Part of the Body, or in any of the Viscera. Secondly, it implies the same as ALVUS (which see). The κοιλίη, with the Addition of ἄνω, that is, ἡ ἄνω κοιλίη, is the Stomach, and sometimes the Thorax; and ἡ κάτω κοιλίη is the lower Belly, or intestinal Tube.

As κοιλίη, therefore, signifies the entire Alimentary Duct, from the Cardia to the Anus, I shall, in this Place, give the Reader the anatomical Description of these Parts, considering them as one Organ, that they may be the better understood.

The Stomach is a great Bag or Reservoir, situated partly in the Left Hypochondrium, and partly in the Epigastrium.

The Figure of the Stomach is like that of the Bag-pipe, that is, it is oblong, incurvated, large, and capacious at one End, and small and contracted at the other. We see this Figure most evidently, when the Stomach is moderately fill'd with Air, or with any other Fluid.

The Curvature of the Stomach gives us Occasion to distinguish two Arches in it, one large, which runs along the greatest Convexity; and one small, directly opposite to the former. I name these Arches the great and small Curvatures of the Stomach; and by the Sides of the Stomach I understand the two lateral Portions, which lie between the two Arches.

The Stomach has two Extremities, one large, and one small, like a crooked Funnel. It has two Openings, call'd the Orifices of the Stomach, one between the great Extremity and the small Curvature; the other at the End of the small or contracted Extremity. The first Opening is a Continuation of the Œsophagus; the other joins the intestinal Canal, and is call'd by the Name of Pylorus.

The Stomach is not situated in the Left Hypochondrium, and Epigastric Region, in the manner represented in most of the Figures. It lies transversely, obliquely, and almost laterally, in such a manner, as that the great Extremity, and the Orifice next it, are on the Left Hand; and the small Extremity, with its Orifice, or the Pylorus, on the Right Hand, and lower, and more inclined, than the former. Therefore we ought, with the ancient Anatomists, to call one of these Orifices superior, the other inferior.

The great Extremity of the Stomach is in the Left Hypochondrium, and, for the most part, immediately under the Diaphragm; yet the superior Orifice is not in the Left Hypochondrium, but almost opposite to, and very near the Middle of the Bodies of the lowest Vertebrae of the Back.

The small Extremity of the Stomach does not reach to the Right Hypochondrium. It bends obliquely backward, toward the upper Orifice; so that the Pylorus lies about two Fingers Breadth from the Body of the Vertebrae, immediately under the small Portion of the Liver, and consequently lower down, and more forward, than the other Orifice by almost the same Distance. This Extremity of the Stomach has sometimes a particular Dilatation on the Side next the great Curvature.

According to this natural Situation, the Stomach, especially when full, lies so, as that the great Curvature is turn'd more forward than downward, and the small Curvature more backward than upward.

One of the lateral convex Sides is turn'd upward, the other downward; and not forward and backward, as they appear in dead Bodies, where the Intestines do not support them in their natural Situation.

If we divide the Stomach, along the two Curvatures, into two equal Parts, we shall see, that the two Orifices do not both adhere to the same Half of this Division, as we would be apt to imagine, according to the common Notion; but that the diaphragmatic Orifice is entirely in the upper Half, and the intestinal Orifice in the lower Half.

Therefore, the Body of the Stomach is so far from lying in the same Plane with the Œsophagus, as it is commonly represented in Figures, drawn from a Stomach taken out of the Body, and laid upon a Table; that it forms an Angle or Fold, immediately at the Passage of the Œsophagus thro' the small Muscle of the

Diaphragm; and it is on account of this Angle, that the superior Orifice is turn'd backward.

The Stomach is composed of several Parts, the chief of which are the different Strata which form its Substance, to which Anatomists give the Name of Tunicae or Coats. These Coats are commonly reckon'd to be four in Number, the outer or common, the fleshy or muscular, the nervous or aponeurotic, and the villous or inner Coat; and they are afterwards subdivided several Ways.

The first or outermost Coat is simply membranous, being one of the internal Productions of the Peritonæum. This appears evidently at the Connection of the superior Orifice with the Diaphragm, where the external Membrane of the Stomach is really continuous with the Membrane which lines the inferior Surface of the Diaphragm; and it is from this, that it has been named the common Coat.

The second or muscular Coat is made up of several Planes of Fibres, which may all be reduced to two, one external, the other internal. The external Coat is longitudinal, tho' in different respects, following nearly the Direction of the Curvatures and Convexities of the Stomach; and the internal Plane is transversely circular.

The Fibres of the external Plane run slanting in several Places, and are intersected by small oblique whitish Lines, which seem to be in some measure tendinous. This Plane is strengthen'd by a particular Fasciculus, which runs along the small Curvature, its Fibres appearing to be less oblique than those of the great Plane.

The Fibres of the inner or circular Plane of this muscular Coat are stronger than those of the outer Plane: They are rather Segments, which unite at different Distances, than entire Circles; and they are likewise intersected by great Numbers of small white Lines, in some measure tendinous, and very oblique, which, all together, represent a kind of Network, the Areolæ or Meshes of which are very narrow.

As these Circles or Segments advance on the great Extremity of the Stomach, they diminish gradually, and form a kind of muscular Vortex, the Centre of which is in the Middle of that Extremity.

Between the outer and inner Planes, round the superior Orifice, there are two distinct Planes, about the Breadth of a Finger, and very oblique, which surround this Orifice in opposite Directions, and intersect each other where they meet on the two lateral Sides.

Along the Middle of each lateral Side of the small Extremity there runs a tendinous or ligamentary flat Portion, above a Quarter of an Inch in Breadth, which terminates in the Pylorus. These two Portions lie between the common and muscular Coats, and adhere very strongly to the first.

Between the same two Coats there is a cellular Substance, which adheres very closely to the external Coat, and insinuates itself between the fleshy Fibres of the second, all the Way to the third, as may be perceived by blowing it up. Some make it a distinct Coat, and call it Tunica Cellulosa; but it is no more than the cellular Portion of the membranous Coat, like the cellular Portion of the Peritonæum.

The third Coat, call'd commonly Tunica Nervosa, sustains, on its convex Side, a very large reticular Distribution of capillary Vessels and Nerves. On the concave Side it seems to be of a very loose Texture, and, as it were, spongy or filamentary, containing a great Number of small glandular Bodies, especially near the small Curvature, and small Extremity of the Stomach.

This spongy Texture resembles fine Cotton, as may be seen by macerating it a little in clear Water, which swells it considerably in a very short Space of Time. It is supported by a kind of Ground-work of very fine ligamentary or aponeurotic Filaments, which intersect each other obliquely, much in the same manner as the third Coat of the Intestines, of which hereafter; and it adheres to the convex Side of the villous Coat.

The fourth Coat of the Stomach is term'd Villosa, because, when it swims in clear Water, some have imagined they saw something in it like the Pile of Velvet. The Antients call'd it Tunica Fungosa, and perhaps this Name agrees best with its true Structure. We observe in it a great Number of small Holes, answering to the small Glands already mention'd.

These two Coats are of a larger Extent than the two former, and they join in forming large Rugæ on the concave Surface of the Stomach; the greatest Part of which are transverse, tho' irregular and waving. There are likewise some longitudinal ones, which intersect the others; but at the Pylorus they all become longitudinal, and terminate there.

At the superior Orifice of the Stomach these Rugæ are in a manner radiated, and seem to be a Continuation of the Plicæ or Folds of the Œsophagus; only they are thicker, and, where these Rugæ and Plicæ meet, they form a sort of Crown, which distinguishes the superior Orifice of the Stomach from the inferior Extremity of the Œsophagus.



In the Interstices of these Rugæ there is often found a sort of slimy Mucus, with which the whole Cavity of the Stomach seems likewise to be moisten'd. This Mucus is much more fluid in living Bodies, and is supplied by the Glands of the Stomach. It may be term'd Succus Gastricus, or Stomachicus.

On the inner Surface of the small Extremity of the Stomach, at the Place where it ends in the intestinal Canal, we observe a broad thin circular Border, with a roundish Hole in the Middle. This Hole is the inferior Orifice of the Stomach, call'd by the *Greeks* Pylorus, which signifies a Porter.

This Border is a Fold or Duplication of the two inner Coats of the Stomach, the Nervosa and Villosa; and it is form'd, in Part, by a Fasciculus, or fleshy Fibres, fix'd in the Duplication of the Tunica Nervosa, and distinguish'd not only from the other fleshy Fibres of the Extremity of the Stomach, but also from those of the Intestines, by a thin whitish Circle, which appears even thro' the external or common Coat, round the Union of the Stomach and Intestines.

The Figure of the Pylorus is that of a Ring, transversely flattened, the inner Edge of which, or that next the Centre, is turn'd obliquely toward the Intestines, like a broad Portion of a Funnel. This inner Edge runs naturally more or less into little Plaits or Gathers, like the Mouth of a Purse almost shut; all which Particulars are very different from what Figures, and dried Preparations, would make us believe. It is, therefore, a kind of Sphincter, which can contract the inferior Orifice of the Stomach, but seems not capable of shutting it quite close.

The principal Arteries of the Stomach are the Coronaria Ventriculi, which runs along the small Curvature, and the two Gastricæ, that is, the Sinistra or Major, and Dextra or Minor, both which form one common Artery, which runs along the great Curvature. The Coronaria Ventriculi becomes united in the same manner with the Pylorica, and both make one common Vessel.

These two arterial Arches send a great Number of Branches toward each other on both Sides of the Stomach, and these Branches are gradually ramified in different Directions, by very frequent Divisions and Subdivisions, the greatest Part of which communicate with those from the other Artery.

From these frequent Ramifications and Communications of the arterial Arches of the Stomach, two different reticular Textures arise, whereof one, which is the largest, lies between the common and muscular Coats in the cellular Substance found there; the other, which is very fine, lies on the Surface of the Tunica Nervosa. This latter is a Production of the first, being form'd by means of a great Number of very short Branches, which go out from the other, and pass thro' the small Interstices between the Fibres of muscular Coats.

By artificial Injections we can shew a third extremely fine reticular Texture of capillary Vessels, which run between the glandular Bodies and Papillæ of the Tunica Villosa. These do not seem, in the natural State, to be purely Blood-vessels, as Inflammations and Injections may incline us to think.

The Arteries of the Stomach come originally from the Cœliaca, by means of the Hepatica, Splenica, and Coronaria. The Pylorica, and Mesenterica superior, likewise contribute to them by Communications, more or less immediate. They communicate also with the Mammariæ Internæ and Diaphragmaticæ, and, by means of the Epigastrica sinistra, with the Mesenterica inferior.

The Veins of the Stomach are Ramifications of the Vena Portæ in general, and in particular of the Mesenterica major, Splenica, and Hæmorrhoidalis interna. They accompany the Arteries more or less, and form nearly the same kinds of Arches and reticular Textures; with this Difference, that they are proportionably greater, their reticular Arcolæ larger, and their external Communications more frequent.

Between the common and muscular Coats of the Stomach we find a great Number of Nerves, of different Sizes. Many of them accompany each other, in form of a broad flat Fasciculus, along the small Curvature of the Stomach, from the superior to the inferior Orifice. The rest are spread in different Directions, on the Sides, Extremities, and great Curvature, forming, at different Distances, a kind of reticular Plexus, from which a great Number of Filaments are detached to the inner Coats.

They arise chiefly from the Nervi Sympathetici Medii, or eighth Pair, by means of the Plexus Coronarius Stomachicus form'd round the superior Orifice of the Stomach, by the Expansion of the Extremities of two large Ropes, which run down upon the Œsophagus, by the Name of Nervi Stomachici. The great sympathetic Nerve, commonly call'd Intercostalis, contributes likewise to them, by communicating Filaments, which the Plexus Stomachicus receives from the semilunar Ganglions of the Plexus Hepaticus, and particularly from the Plexus Splenicus.

The Stomach receives, in general, whatever the Mouth and

Tongue send thither, thro' the Canal of the Œsophagus; but its particular Use is to receive the Aliments, to contain them for a longer or shorter time, in proportion as they are more solid and fluid, and to digest them; that is, to put them in a Condition to be turn'd into that nutritious Fluid, call'd Chyle.

This Operation, which goes by the general Name of Digestion, and by which Chylification begins, is perform'd partly by the Succus Gastricus, which flows continually from the Tunica Villosa, and partly by the continual Contraction and Relaxation of the muscular Coat. These Motions, in Men, are but very weak, and no ways sufficient for Digestion, without the Assistance of the alternate Motions of the Diaphragm, and Muscles of the Abdomen.

The Pylorus, or fleshy Circle of the inferior Orifice of the Stomach, serves to retain the Aliments in it, till they have acquired a sufficient Degree of Fluidity, to pass easily thro' that Opening. I say, easily; for, by a particular Irritation of the muscular Coat of the Stomach, and still more by a violent Contraction of the Diaphragm and Muscles of the Abdomen, the Contents of the Stomach may be very soon forced towards the small Extremity, and push'd thro' the Pylorus.

The gentle and alternate Motions of the orbicular Fibres of the muscular Coat may assist in sending thro' the Pylorus, in the natural Way, the Aliment that is sufficiently digested. This was call'd the peristaltic or vermicular Motion, by those who believed, that it is successively reiterated, like that of Earth-worms when they creep.

Trituration might be a proper enough Term for this Operation, provided it be made to signify only a gentle Agitation, or Action of the fleshy Fibres, in a Substance continually moisten'd by the Gastric Liquor, and not a violent Grinding of a dry Substance.

The Situation of the Stomach, which is nearly transverse, is likewise of Use in making the Aliment remain long enough in that Cavity, and may serve to make the Length of this Stay in some measure arbitrary, by means of the different Postures of the Body; for, when we lie on the Left Side, the Aliment must remain longer, than when we lie on the Right Side, &c.

The Obliquity of the Stomach may serve to clear up a Difficulty, that very much torments those who believe, that both Orifices of the Stomach lie in the same Level; which is, how any heavy Substance, once got into the Stomach, can ever rise again to this Level, to pass into the Intestines.

#### *The INTESTINES in general, and INTESTINUM DUODENUM in particular.*

Between the Pylorus and the very lowest Part of the Abdomen lies a long Canal, bent in a great many different Directions, by numerous Convolutions or Turnings call'd the Intestines.

This Canal, thus folded and turn'd, forms a considerable Bulk, which fills the greatest Part of the Cavity of the Abdomen; and it is connected, through its whole Extent, to membranous Productions or Continuations of the Peritonæum, principally to those call'd the Mesentery and Mesocolon.

The Incurvations of the intestinal Canal form two Arches, a small one, by which it is connected to the Mesentery and Mesocolon, and a great one on the opposite Side, which lies loose. The whole Canal is generally about seven or eight times as long as the Subject.

The intestinal Canal is neither of an equal Size nor Thickness, through its whole Length; from whence Anatomists have taken Occasion to consider its different Portions as so many particular Intestines, and to divide them all into small and great.

And as they still found some Differences in each Class, taken all together, they divided each into three Portions, which they distinguish'd by particular Names. In the small Intestines the three Portions are named Duodenum, Jejunum, and Ileum; and, in the great Intestines, Cæcum, Colon, and Rectum.

The Intestines in general are composed of several Coats, much in the same manner with the Stomach. The first and outermost is a Continuation of the Mesentery, or of some other Elongation or Duplication of the Peritonæum.

This is commonly term'd the common Coat, and it has a cellular Substance on its inner Surface, like that of the Stomach, which M. *Ruyssch* thought fit to call a distinct Coat, by the Name of Tunica Cellulosa.

The second Coat of the Intestines is fleshy or muscular, and made up of two Planes, one external, the other internal. The external Plane is very thin, and its Fibres longitudinal; the internal Plane is thicker, and its Fibres run transversely round the Circumference of the intestinal Cylinder.

I am not of Opinion, that these Fibres are spiral, nor that they are perfect Circles or Rings; but they seem rather to be Segments of Circles, disposed much in the same manner as in the



the Stomach, and thus surrounding entirely the intestinal Canal.

These two Planes adhere closely together, and are separated with great Difficulty. They adhere likewise to the common Coat, by the Intervention of the cellular Substance; which is in greater Quantities on the Side next the Mesentery than on the other.

The third Coat is call'd Nervosa, and is something like that of the Stomach. It has a particular Plane, which serves as a Basis to sustain it, made up of very fine, strong, oblique Fibres, which seem to be of the ligamentary or tendinous Kind.

To see this Plane distinctly, a Portion of the Intestines must be inflated, the common Coat removed, and the fleshy Fibres scraped off.

This Coat sustains two reticular Substances, which are both vascular, one arterial, the other venal, accompanied by a great Number of nervous Filaments. These Vessels and Nerves are Productions of the Mesenteric Vessels and Nerves; and, as they surround the whole Canal of the Intestines, some Anatomists have form'd them into a distinct Coat, by the Name of Tunica Vasculosa.

The nervous Coat sends off, from its inner Surface, a great Number of Portions of Septa, more or less circular, which contribute to the Formation of what are call'd Valvulae Conniventes. It likewise seems to sustain several different glandular Bodies, which we discover in the Cavity of the Intestines.

The fourth or innermost Coat is very soft, and is named Tunica Villosa. It has the same Extent with the third Coat, which supports it, and it lines all the Septa of that third Coat; but it is not uniform thro' the whole Canal.

#### INTESTINA TENUA.

The small Intestines form one continued uniform Canal; and tho' three Portions of it have three different Names, yet we have no sufficient Marks whereby to distinguish them, to fix the precise Extent or Length of each Portion, or to settle its just Limits.

The first and smallest Portion of the whole Canal is called Duodenum; the second, which is much longer, Jejunum; and the third, which is still longer than the second, Ileum.

The first Portion of the small Intestines was call'd Duodenum, from the Length ascribed to it by the Antients, that is, the Breadth of twelve Fingers; and the Moderns need not cavil about this Length, if it is measured with the Ends of the Fingers of the Subject.

This Intestine, having arisen from the Pylorus, is immediately bent a little backward, and obliquely downward; then it bends a second time toward the Right Kidney, to which it is a little connected; and from thence passes before the renal Artery and Vein, ascending insensibly from Right to Left, till it gets before the Aorta and last Vertebrae of the Back. It continues its Course obliquely forward, by a gentle Turn, which may be reckon'd a third Incurvation, and also the Extremity of the Duodenum.

Through this whole Course the Duodenum is firmly bound down by Folds of the Peritonæum, especially by a transverse Duplicature, which gives Origin to the Mesocolon. The two Laminæ of this Duplicature, being at first separate, and soon after uniting, must leave a triangular Space between them, which is lined with a cellular Substance.

It is in this Space that the Duodenum adheres, by means of the cellular Substance, to the Parts already nam'd; and the Intestine is contained therein, as in a Case; so that, without Dissection, we can see nothing but its two Extremities, and even these are hid by the Colon, and by the first Convolutions of the Jejunum.

The first Coat of the Duodenum is consequently different from that of the other small Intestines, having this peculiar to it, that it does not invest the whole Circumference of the Intestine, because, thro' the greatest Part of its Length, it lies in the triangular Space already mention'd; and for the same Reason there is a greater Quantity of cellular Substance belongs to the outer Coat of the Duodenum, than to that of the other Intestines.

The muscular Coat of the Duodenum is thicker than in the Jejunum and Ileum.

The Tunica Nervosa and Villosa form conjointly, on the Insides of this Intestine, a great Number of small Duplicatures, which advance into the Cavity more or less directly, like Portions of circular Planes, with one Edge fixed to the Intestine, and the other loose. These are what Anatomists call Valvulae Conniventes.

The loose or floating Edge of these Valves is form'd into small Gathers or Waves in the natural State: I say designedly, in the natural State, to rectify the false Ideas which dry Preparations of the Intestines are apt to beget. The whole Surface of these Duplicatures or Valves is villous, as well as that of the Interstices between them.

The Villi of this Intestine are thicker than in the Stomach;

but the Texture of them in Men is not like Hairs, as they are commonly represented in Figures; but rather like that of a fungous, granulated Substance, composed of an infinite Number of very fine Papillæ of different Figures, in which we see, thro' a Microscope, a Multitude of depress'd Points or Pores, by which their whole Surface seems to be pierc'd.

By the same Help we observe, on different Places of the inner Surface of this Intestine, several round villous Tubercles, rising, like small Verrucæ, at different Distances from each other.

This Substance sustains an infinite Number of capillary Vessels of different Kinds; for, besides the Blood-vessels, we sometimes observe a great Number of white Filaments, which run thro' it, and end at its inner Surface, like so many capillary Roots of the Vessels; call'd Venæ Lactææ.

The fungous Substance, which binds these capillary Filaments together, and surrounds them, is very tender; and the capillary Extremities of the small Blood-vessels, distributed thro' it, seem to be turned toward the Pores of the Papillæ. Through these Pores a mucous Fluid, more or less transparent, is discharg'd, which continually moistens the Cavity of the Intestine.

The internal Surface of the Duodenum is furnish'd with a great Number of small flat glandular Tubercles, raised on the Sides, and depressed in the Middle, by a kind of Fossula; and they are more numerous near the Beginning of this Intestine than any-where else. About the Pylorus they lie in a manner in Heaps or Clusters, and from thence the Distance between them increases gradually all the Way to the other Extremity, where they are single.

These Glands, when examined carefully, appear like little Bladders, with the Orifices turn'd toward the Cavity of the Intestine, and the Body fix'd in the spongy Substance next the nervous Coat. They furnish a particular Fluid, which is often found to be viscid.

In the inner Surface of the Duodenum, almost at the lower Part of the first Incurvation, and on the shortest Side, there is a longitudinal Eminence, in the Point or Apex of which lies a particular Opening, which is the Orifice of the Ductus Biliaris, within which the Ductus Pancreaticus likewise opens.

This Intestine is commonly the widest, tho' the shortest, of the small Intestines, and is invested by more cellular Substance, especially while within its triangular Case, where it wants the outer Coat, which the others have; and consequently it is more easily dilatable, by the Substances which might otherwise stick within it. See DUODENUM.

#### INTESTINUM JEJUNUM.

The Jejunum, so call'd because it is oftener found empty than the Ileum, begins at the last Incurvation of the Duodenum, and is there connected to the Beginning of the Mesocolon.

From thence it bends downward from Left to Right, and obliquely forward, or from the Vertebrae, and makes several Convolutions, which lie principally in the upper Part of the umbilical Region. Through all this Course it is connected to the Mesentery.

It is a pretty difficult Matter to fix the exact Bounds between this Intestine and the Ileum. The external Marks of a redder Colour in the one than in the other, tho' pretty common, are not constant; and the internal Marks, fix'd from the Plurality of Valvulae Conniventes, are indeterminate, and oftentimes appear only from Dissection.

These two Intestines may be better distinguished by their different Situations, which are pretty regular; but as even this Mark is not particular enough, the most easy Way that I have been able to contrive, and which will, in most Cases, be found sufficiently exact, is to divide both Intestines into five Parts, and to allow nearly two Fifths to the Jejunum, and three Fifths and a little more to the Ileum.

The Coats of the Jejunum are nearly of the same Structure with those of the Duodenum, but thinner. The common Coat is a Continuation of the Mesentery, and the cellular Substance is in less Quantity than in the Duodenum, and, indeed, seems to be altogether wanting along the great Curvature of the Convolutions, where the longitudinal Fibres of the muscular Coat adhere very closely to the external Membrane.

This muscular Coat is not so strong as that of the Duodenum. The longitudinal Plane of Fibres is very thin, and almost imperceptible, except along the great Curvature, opposite to the Connection of the Mesentery, where we see, thro' the membranous Coat, a kind of whitish ligamentary Band, about the third Part of an Inch in Breadth, which is continu'd along the great Curvature of all the Convolutions of this Intestine, and of the Ileum.

This ligamentary Band is like those we observe on the Sides of the small Extremity of the Stomach. It adheres perfectly to the membranous Coat, and to the longitudinal Fibres of the muscular Coat, which are here more visible, and appear to be stronger than in any other Place.

The Tunica Nervosa, which I choose rather to call Reticularis, and its proper cellular or lanuginous Substance, have nothing



thing peculiar to them more than has been already said about the Intestines in general. By blowing artfully into this Substance, it may be made to swell so much, round the whole Cavity of the Intestine, as to destroy all the Duplicatures or Valvulæ Conniventes.

These Valves in this Intestine are very broad, very numerous, and very near each other. On the Side of the great Curvature their Circumference is continuous and uniform, but, next the small Curvature, there are several Breaks in them, the Extremities of some advancing beyond the rest, and terminating in Points. Some of these Valves go quite round, others only some Part of the Way, and some of them are very small, which go obliquely between two large ones, forming a kind of Communication.

The Papillæ of the Tunica Villosa are here more raised, more loose, and floating, than in the Duodenum; and each of them seems to be divided into several others, by Incisures of a very singular Kind. In other respects they agree pretty much with what has been said in the Description of the Intestines in general. The Observations and Figures publish'd by M. *Helvetius*, in the *Memoires* of the Royal Academy, express these Papillæ, and the whole Tunica Reticularis, very justly.

The glandular Lacunæ of the Jejunum are of the same Structure with the Glandulæ Brunneri or Duodenales; but they are disposed in a different Manner. They are partly single at different Distances from each other, and partly in several Clusters, like flat oblong Bunches of Grapes, called Plexus Glandulosi Peyerii. These are in the largest Quantity near the great Curvature, and they cross thro' several Valvulæ Conniventes at once.

#### INTESTINUM ILEUM.

The Convolutions of the Intestinum Ileum surround those of the Jejunum on the two lateral and lower Sides, and it passes in a winding Course from the Left Side, by the Hypogastrium, to the Right Side, where it terminates a little below the Right Kidney, joining the Intestina Crassa. The lateral Convolutions are supported by the Ossa Ileum, so called, not from this Intestine, but from the Region of the Abdomen term'd Ileæ.

The Structure of the Ileum is much the same with that of the Jejunum, only the internal Duplicatures or Valvulæ Conniventes decrease gradually both in Number and Size. Near the Extremity of the Ileum their Direction is changed, and instead of being transverse or circular, they become longitudinal, and terminate in a kind of Pylorus, which advances into the Cavity of the great Intestines.

We observe likewise in this Intestine, as in the Jejunum, single or solitary Glands or Lacunæ, and also reticular Glands, or Glands in Clusters, the last of which, at the Extremity of this Intestine, is oftentimes of a great Extent; but the greatest Part of these Glands appear to be flatter here than in the Jejunum. The cellular Substance of the external Coat is in less Quantities than in the foregoing Intestines, and the Ileum appears commonly more pale, or not so red as the Jejunum.

For an Account of the INTESTINUM CÆCUM, see CÆCUM and APPENDICULA.

#### INTESTINUM COLON.

The Colon is the most considerable of all the Intestines. From the Cæcum, of which it is a Continuation, it reaches, in form of an Arch, above the umbilical Region, and to the lower Part of the Left Hypochondrium. Its Continuity is, however, a little interrupted by the Ileum, which advances into the Cavity of the Colon, and, together with a certain Fold of that Intestine, forms what is call'd Valvula Coli.

The whole convex Side of the Colon is divided longitudinally into three Parts, by three ligamentary Bands, continu'd from those of the Cæcum, and of the same Structure with these. Two of these Bands run on each Side, along the great Curvature of the Colon, and the third along the small Curvature.

The uppermost Band of the two, that belong to the great Curvature, is the broadest of the three; that which belongs to the small Curvature, is the narrowest, and lay hid by the Connection of the Mesocolon, till it was brought to Light by M. *Morgagni*.

These three longitudinal Bands do the Office of longitudinal Fræna, between which this Intestine is, thro' its whole Length, alternately depressed into transverse Folds, and raised into considerable Eminences. All the Folds are Duplicatures, which form Portions of Valvulæ Conniventes, in the Cavity of the Intestine; and the Eminences form Receptacles, call'd the Cells of the Colon.

All the Coats of the Colon concur equally to the Formation of these Duplicatures and Cells, the Depth of which decreases gradually toward the Extremity of the Intestine; and neither of them go any further than the ligamentary Bands.

These Portions of the Colon, which are immediately cover'd by the ligamentary Bands, are smooth, and without Rugæ; and therefore, if these Bands alone are cut across, the Intestine is not elongated sufficiently to destroy all the Folds and Cells.

The common Coat on one Side is a Continuation of the Mesocolon, and, on the other Side, it contributes, by the same Continuation, to form the Omentum. The longitudinal Fibres of the muscular Coat are very slender; and those which answer to the annular or circular Fibres of the small Intestines, are only Segments stretched over the Eminences and Folds. The other Coats are nearly as in the Cæcum; only the glandular Lacunæ, or solitary Glands, are broader and more numerous.

The Arch of the Colon begins under the Right Kidney, near the Hanch. It runs up on the fore Side of that Kidney to which it is connected, passes under the Vesicula Fellis, which tinges it with a yellow Colour at that Place, and continues its Course before the first Incurvation of the Duodenum, to which it adheres, and partly hides it. In this Part of its Course, therefore, there is a remarkable Connection between the Colon, Duodenum, Right Kidney, and Vesicula Fellis.

From thence the Arch of the Colon runs before the great Convexity of the Stomach, and sometimes a little lower; then turns backward under the Spleen, in the Left Hypochondrium, runs down on the fore Side of the Left Kidney, to which it is connected; below this Kidney turns toward the Vertebrae, and terminates there by a double Incurvation, or by two opposite Convolutions, which represent, in some measure, an inverted Roman S.

These last Convolutions of the Colon are sometimes multiplied, and even advance to the Right Side of the Pelvis; and along the great Arch, and the two last Incurvations, there are a kind of Fringes call'd Appendices Coli Adiposæ.

At the Place where the Cæcum joins the Colon, one Portion of the Circumference of both is depressed, and forms a large Fold on the Inside, which advances into the Cavity of the Intestine. It is a little open in the Middle, and its Extremities are very thick, by reason of the mutual Duplicature of the Coats of the Cæcum and Colon.

The Extremity of the Ileum is, as it were, grafted in the Opening of this Fold, and strongly united to its Sides by the Adhesion of its transverse Fibres to the transverse Fibres of the Cæcum and Colon.

This Union forms a pretty thick Ring, which likewise advances into the common Cavity of the Cæcum and Colon, where it is wrinkled or formed into Gathers, almost like the lower Extremity of the Œsophagus, the Pylorus, or Inside of the Anus. Its Circumference is more or less oval; and, by a kind of Continuity with the common Fold of the Cæcum and Colon, it forms two Productions, which M. *Morgagni* calls the Fræna of the Valvula Coli.

The membranous Coat of the Extremity of the Ileum is continu'd on the Cæcum and Colon, without sinking into any Fold, at the Place where the Ileum enters the Colon. The longitudinal Fibres of the muscular Coat seem here to be confounded with the nearest circular Fibres of the Cæcum and Colon.

The inner Portion of the muscular Coat of the Ileum runs in between the circular Fibres of the Ileum and Colon, as into a common Fold of these two Intestines; from all which a pretty thick short Portion of a fleshy Tube is formed, which is the circular Rising already mention'd.

The nervous and villous Coats of the Extremity of the Ileum likewise enter the common Cavity of the Cæcum and Colon, and, on the Edge of the circular Rising, join the like Coats of these two Intestines; so that the circular Rising, or short muscular Tube, is covered, both on the outer and inner Sides, by a nervous and villous Coat; that on the Inside being supplied by the Ileum, and the other by the two great Intestines.

The Situation of this Extremity of the Ileum is most commonly transverse, and is inserted almost in the same Direction in the common Cavity of the two Intestines; but it is often a little more inclin'd towards the Cæcum than the Colon. And whereas, in all other Places, the Ileum is wide, and easily dilatable, it is very narrow at its Insertion, and its Sides more solid and firm.

It is chiefly in this Structure, that the Mechanism of the Insertion of the Ileum in the Cæcum and Colon consists; about which Insertion or Opening Authors are very much divided, some reckoning it a Valve, others only a Sphincter.

It is very evident, from what I have said, that it is a double Machine, contriv'd to hinder the Return of the Excrements into the Ileum, because it can produce this Effect partly as a Valve, and partly as a kind of Sphincter. The dried Preparations of this Part give a very false Idea of its Structure and Conformation; and the same thing is to be said of the Opening of the Appendicula Vermiformis into the Cæcum.

The capacious Arch of the Colon is connected by both Extremities to the Regio Lumbalis, near the Kidneys, by two particular Ligaments, one on the Right-side, the other on the Left, which are only small Duplicatures of the Peritonæum more or less transverse.

The remaining Portion, which forms the two Convolutions in form of the Roman S, contracts below the Left Kidney, being



being narrower there than lower down. The Coats of this Portion become gradually thicker and stronger, and likewise the ligamentary Bands, which approach each other by Degrees, and seem to increase in Breadth.

#### INTESTINUM RECTUM and ANUS.

The last of all the Intestines is nam'd Rectum, or the strait Gut, from its Situation; for, when view'd directly forward, it appears to run down in a strait Course from the last Vertebra of the Loins, on the fore Side of the Os Sacrum, all the Way to the Os Coccygis, where it ends in what is call'd the Anus.

This Intestine, properly speaking, is a true Continuation of the last Convolution of the Colon; and it is the Repository, Sink, and common Sewer, of the whole intestinal Canal. It has likewise a special Relation to the Bladder, and to the Parts of Generation in both Sexes.

The Rectum, having passed below the last Vertebra of the Loins, to the Inside of the Os Sacrum, is bent backward on that concave Side, to which it is connected, and, having reached the Os Coccygis, it runs likewise in the Direction of that Bone, and bends a little forward, terminating beyond the Extremity of the Coccyx.

The Figure of this Intestine varies according as it is full or empty. When empty, it is irregularly cylindrical, and sinks in by a kind of transverse Folds; and, in that State, it is about three Fingers-breadth in Diameter, more or less: When full, it is wider in proportion to the Quantity of Fæces, Urine, or whatever else is contain'd in it; and it may be extended to the Size of a large Bladder, so as to represent a kind of Stomach.

The membranous Coat often contains a great Quantity of Fat, spread between it and the muscular Coat, and forming, round the Intestine, numerous Eminences, in the room of the Appendices Adiposæ of the Colon.

The muscular or fleshy Coat is very thick. The longitudinal Fibres, which, in the other Intestines, are very thin, are in this stronger than the circular Fibres of the rest. The ligamentary Bands continue to increase in Breadth, and to approach each other, as has been said; and it is to the fleshy Fibres of these Bands that the Thickness of the longitudinal Fibres seems to be owing.

The nervous, or filamentous and internal Coats are larger here, than in the other Intestines; and, when the Rectum is empty, they form a great Number of waving Rugæ in its Cavity, which disappear, in proportion as that Cavity is fill'd.

The innermost Coat is very improperly term'd Villosa, and scarce deserves the Name of Papillaris, because of the Smallness of the little Corpuscles spread on its Surface. It contains a great Number of single or solitary Glands; and it is always moisten'd by a Mucus of different Consistences, discharg'd by these Glands or Folliculi, and perhaps by the Corpuscles also.

Near the Extremity of this Intestine, the Rugæ or Folds become, in a manner, longitudinal; and, at last, towards the Circumference of the inner Margin of the Anus, they form little Bags, or semilunar Lacunæ, the Openings of which are turn'd upward towards the Cavity of the Intestine. These Lacunæ are something like those at the lower Extremity of the Œsophagus, or upper Orifice of the Stomach.

At length the Extremity of the Rectum contracts, and terminates by a narrow Orifice, call'd the Anus, the Sides of which are disposed in close Folds or Gathers. This Extremity of the Intestine has several Muscles belonging to it, some of which surround it like Sphincters; the rest are broad, fleshy Planes inserted in it, and which, being likewise fix'd to other Parts, sustain it in its natural Situation, and restore it to that Situation, when disturb'd by the Force necessary for the Exclusion of the Fæces. These latter Muscles are term'd Levatores Ani; the first go by the general Name of Sphincters.

These Sphincters are three in Number, one intestinal or orbicular, and two cutaneous or oval, whereof one is large, superior, and internal, the other small, inferor, and external.

The intestinal or orbicular Sphincter of the Anus consists merely in an Augmentation of the inferior Portion of the fleshy Fibres of the Extremity of the Rectum.

In order to the Description of the Anus, there are two Ligaments, which must be describ'd here; the Ligamentum Cutaneum Ossis Coccygis; and the other, Ligamentum Pubis Interosseum.

The cutaneous Ligament goes out anteriorly from the Extremity of the Os Coccygis. It is very slender, and divides into two Portions at the Orifice of the Anus, which run into the Membrana Adiposa, and are inserted in the Skin on each Side of the Anus by a kind of Expansion, and, continuing to diverge, they are lost on the two Sides of the Perinæum.

The interosseous Ligament of the Os Pubis is a very strong triangular Membrane, fix'd, by two of its Edges, in the inferior Branches of those Bones, all the Way up to their common Symphysis. The third Edge, which is the lowest, is loose; and this whole Membrane, the Middle of which is perforated by a particular Hole, is stretched very tight between the two

Bones, and under their cartilaginous Arch, to which it adheres very closely.

At the lower Part of this interosseous Ligament, along its whole or loose Edge, lies a digastric Muscle, fix'd, by its two Extremities, in the Branches of the Os Pubis, its middle Tendon lying on the Middle of the Edge of the Ligament. This Muscle is to be describ'd under its proper Article, and it is only mention'd here, because of the Relation it bears to the cutaneous Sphincters of the Anus. It is call'd by some Musculus transversalis Urethræ; by others, Musculus triangularis.

The cutaneous Sphincters have each an anterior and posterior Insertion, ending both Ways in a kind of Point, and comprehending the Orifice of the Anus between their middle Portions.

They are distinguish'd from each other by their Situation, by their Size, and by a kind of white cellular Line. The greatest of the two appears to be double, and the smallest lies nearest the Skin, and adheres most closely to it.

They are inserted backward, partly in the Apex of the Os Coccygis, and partly in the contiguous Portion of the cutaneous Ligament of that Bone. Forward their chief Insertion is in the middle Tendon of the Transversalis Urethræ; and they have likewise some Connections to other Muscles of the Urethra.

The Levatores Ani are broad, thin, muscular Portions, fix'd by one Extremity of their fleshy Fibres, round the concave Side of the inferior Portion of the Pelvis, from the Symphysis of the Os Pubis, beyond the Spine of the Ischium. The other Extremity of these Fibres runs down on each Side behind, and under the Curvature of the End of the Rectum, where they meet together, and unite from the Basis of the Os Coccygis all the Way to the Margin of the Anus.

By their superior Insertions, these Portions are, on each Side of the Pelvis, divided into three Classes; an anterior, middle, and posterior Class. The two anterior Classes reach from about the Middle of the Symphysis of the Os Pubis to the upper Border of the Foramina Ovalia of the Pelvis. The middle Classes continue the same Course immediately above the Insertion of the Obturator internus, on the Os Ischium, and a little on the Os Ileum. The posterior Classes are spread on the inner Sides of the Os Ischium to the spinal Apophyses of these Bones, and even a little beyond these, on the Ligamenta Sacro-sciatica.

The anterior Portions are, in their Passage, connected to the prostate Glands, to the Neck of the Bladder, to the Bulb of the Urethra; and they sometimes send Fibres to the Musculus transversalis Urethræ.

The Fibres of all these Portions, having, by their superior Insertions, formed this large and ample Circumference, run down obliquely, from before, backward, contracting in Breadth, and approaching each other in the Manner of truncated Radii; and behind, and under the Extremity of the Rectum, they form a digastric Muscle, something like the Mylo-hyoidæus, which terminates the bony Pelvis below, and forms the Bottom of the Cavity of the Abdomen, as the Diaphragm forms the upper Part.

It is here necessary to observe, that the Muscles of the Os Coccygis may be looked upon as Assistants to the Levatores.

We ought likewise to remark, that the Margin or Edge of the Anus is form'd by the Union of the Skin and Epidermis with the internal Coat of the Rectum; so that the most superficial Portion of that Coat seems to be a Continuation of the Epidermis.

#### MESENTERIUM and MESOCOLON.

This great Bundle of Intestines is not left to move at random in the Cavity of the Abdomen, but artfully bound down by a membranous Web, which prevents the intestinal Convulsions from being intangled in each other, and from being twisted or compressed in all their different Ways of Meeting; and yet allows them a gentle, floating, but limited, Motion.

This Web goes still by the ancient Greek Name of *Mesentery*, as being, in some measure, in the Middle of the Intestines. It is distinguish'd into two Portions, one of which, being very broad, and very much plaited, connects the small Intestines, the other, which is long, and incurvated, does the same Office to the great Intestines.

These two Portions are, in Reality, only one and the same Continuation of the membranous Lamina of the Peritonæum doubled back upon itself; and they are distinguish'd only by their Breadth. Taken both together, they form a kind of spiral Roll, more or less plaited in its Circumference. The first Portion has retain'd the Name of *Mesentery*, the other is term'd *Mesocolon*.

The *Mesentery* begins at the last Incurvation of the Duodenum, and runs obliquely, from Left to Right, along the Vertebrae of the Loins. In this Space, the membranous Portion of the Peritonæum is detached on both Hands, produces a Duplication by two Elongations, or particular Laminæ, applied to each other, and thus forms the *Mesentery*.

It is narrow at its upper and lower Parts, but chiefly at the upper. The middle Portion is very broad, and the Edge of it,



next the Intestines, is every-where very much plaited. These Plaits or Folds are only waving Inflexions, such as may be observ'd in the Edge of a Piece of Shamoy, which has been often drawn through the Fingers. They make this Edge of the Mesentery very long, and they run through about one-third of its Breadth.

The two Laminæ are join'd together by a cellular Substance, which contains Glands, Vessels, and Nerves; and, in some Subjects, it has a great Quantity of Fat, which keeps the two Laminæ at a good Distance from each other.

Along the whole Circumference of the Mesentery, the two Laminæ are naturally separated, and applied to the two Sides of the small Intestines, which they invest by their Union, or rather reciprocal Continuation, on the great Curvature of that Canal, and carry it as in a Scarf or Sling. This is what forms the external or membranous Coat of the Intestines.

The Mesocolon is the Continuation of the Mesentery, which, having reach'd the Extremity of the Ileum, contracts, and changes its Name. At this Place, the particular Lamina, which is turn'd to the Right-side, forms a small transverse Fold, call'd *Ligamentum Coli Dextrum*.

Afterwards, the Mesocolon ascends towards the Right Kidney, where it seems to be lost, by the immediate Adhesion of the Colon to that Kidney, and to the first Incurvation of the Duodenum. Then it appears again, and, increasing in Breadth, it continues its Course almost transversely under the Liver, Stomach, and Spleen, where it begins to run downward under the Left Hypochondrium towards the Kidney on the same Side.

Thro' this whole Course, the Mesocolon extends in Breadth, and forms nearly a transverse semicircular Plane, very little plaited at its great Circumference. By this Circumference or Edge, it is connected to the Colon, and hides that ligamentary Band of this Intestine, which runs along its small Curvature. By its short or small Edge, it forms the triangular Case of the Duodenum; and, by its great Edge, the external Coat of the Colon, in the same manner as the Mesentery does that of the small Intestines. As it passes under the large Extremity of the Stomach, it adheres a little to the lower Portion of that Extremity, as the Diaphragm does to the upper.

Having got below the Left Kidney, it contracts, and forms another transverse Fold, call'd *Ligamentum Coli Sinistrum*. Afterwards it expands again, but not so much as in the upper Part, and runs down on the Left Psoas Muscle towards the last Vertebrae of the Loins. This descending Portion is fixed to the Convolutions of the Colon, in the same manner as the superior Portion is to the Arch of that Intestine.

The Intestinum Rectum is likewise invested by a particular Production of the Peritonæum, call'd commonly by the barbarous Name of Meso-rectum. This Production is very narrow, and, about the Middle of the Foreside of the Rectum, it forms a transverse semicircular Fold, which appears when the Intestine is empty, but is lost when it is filled.

*Glandulae Mesentericae, Vasa Lymphatica & Lactea.* See CHYLUS.

#### *The BLOOD-VESSELS and NERVES of the INTESTINES.*

The Duodenum has commonly a particular Artery called Duodenalis or Intestinalis, which comes indifferently from the Stomachica Coronaria, Pylorica, Gastrica major, or Hepatica. It has likewise several distinct Ramifications from these Trunks, and from the Mesenterica Superior and Splenica, which Ramifications communicate with each other.

The Arteria Duodenalis, and the other additional small Arteries, form a vascular Net-work round the muscular Coat of the Intestine, which sends out a great Number of Capillaries towards both the outer and inner Sides, that make the whole Intestine look of a red Colour.

The Veins of the Duodenum are Branches of the Vena Portæ, and the Distribution and Denomination thereof is pretty much the same with that of the Arteries; only they communicate more with each other, than the Arteries, and also with the great hæmorrhoidal Vein.

The venal Ramifications form round the Duodenum a Net-work, like that of Arteries; and the same kind of vascular Texture is more or less to be found on all the other Intestines.

The Arteries of the Jejunum come chiefly from the Mesenterica Superior, and some from the ascending Branch of the Mesenterica Inferior. The Veins are, for the most part, Branches of the great Meseraica, and the rest come from the Splenica and small Meseraica, or Hæmorrhoidalis Interna.

The principal subaltern Trunks of these Arteries and Veins accompany each other through the cellular Substance between the Laminæ of the Mesentery, are distributed by Branches and Ramifications, and form Masses, Lozenges, and Arches. The last of these Arches and Lozenges, or those next to the Intestine, produce two small vascular Planes, which separate from each other very distinctly, and surround the intestinal Canal in a reticular Manner.

The Blood-vessels of the Ileum come from the same Sources with those of the Jejunum; and it ought to be observed con-

cerning both these Vessels, and those of the Jejunum, that, in their whole Course through the Mesentery, they give Ramifications to the Glands, Laminæ, and cellular Substance of the Mesentery; and also, that there is a kind of Communication between several small meseraic Veins, and the capillary Branches of the Venæ Lumbares and Spermaticæ.

The Arteries of the Cæcum and Appendicula Vermiformis are Ramifications of the last Branch, from the convex Side of the Mesenterica superior; and they have likewise some small ones from the second and third Branches, when both are found. The Veins of these two Parts are Ramifications of the great Meseraica; and one of these Branches is by *Riolan* termed Vena Cæcalis.

The straight Portion of the Arch of the Colon, or that which is an immediate Continuation of the Cæcum, is supplied with Arteries by the second Branch, that comes from the concave Side of the Mesenterica superior, and likewise a little by the third, when there is a third.

The superior or middle Portion of the Arch of the Colon is furnished by the first Branch, from the same Side of the Mesenterica superior, which, by a Bifurcation, communicates on both Hands with the other Portions of the Arch of the Colon.

The Left Portion of this Arch derives its Arteries partly from the first Branch of the same Mesenterica, and partly from that of the Mesenterica inferior; which two Branches form the celebrated Communication, or common Arch of the two Mesentericæ.

By means of this Communication or Continuation, in case one Artery should be obstructed or compressed, the other would furnish Blood to all the Branches below the Place of the Obstruction. The second Branch of the Mesenterica inferior gives likewise small Arteries to the Left Extremity of the Colon.

The descending Convolutions of the Colon, which represent a *Roman S*, are supplied by the other Branches of the Mesenterica inferior, the last of which forms the Hæmorrhoidalis interna.

The Veins of all these Portions of the Colon are Branches and Ramifications of the Vena Portæ Ventralis, and principally of the subaltern Trunk, the Meseraica major, and Meseraica minor, or Hæmorrhoidalis interna. The Distribution of these Branches and Ramifications is, in some measure, the same with that of the Arteries.

The Arteries of the Rectum are furnish'd by the Hæmorrhoidalis interna, the last Branch of the Mesenterica inferior, which communicates with the Hypogastrica, and particularly with the Hæmorrhoidalis externa, a Production of one of these Arteries.

The Veins of the Rectum are Ramifications of the last Branches of the Meseraica minor, or Hæmorrhoidalis interna; and they communicate with the Hæmorrhoidales externæ, which are Branches of one of the Hypogastricæ. They communicate likewise with the capillary Ramifications of the other hypogastric Veins, which go to the internal Parts of Generation of both Sexes.

It is here to be observ'd in general, that there is a successive Continuation, more or less simple or multiplied, between all the Arteries of the intestinal Canal, and likewise between all the Veins; and also that the Veins are here thinner, and more capacious, than the Arteries, in a greater Proportion than in the other Parts of the Body.

The Nerves of the Duodenum are the middle Plexus of the semilunar Ganglion, and some Filaments of the Plexus Stomachicus and Hepaticus.

The Nerves of the Jejunum, Ileum, and mesenteric Glands, are the Plexus mesentericus superior, the posterior mesenteric Fasciculi, and the Plexus Mesentericus inferior.

The Nerves of the Cæcum are the posterior mesenteric Fasciculi or Plexus, and the Plexus Mesentericus inferior.

The Nerves of the Arch of the Colon are the same Fasciculi, and the two Plexus Mesenterici.

The Nerves of the last Convolutions of the Colon are the posterior mesenteric Fasciculi, and the Plexus Mesentericus inferior, and Submesentericus.

The Nerves of the Rectum are the Plexus Mesentericus inferior, Plexus Submesentericus or Hypogastricus, and the two Ganglions of that Plexus.

The Nerves of the Anus, and of its Muscles, are the Ganglions of the Plexus Submesentericus, the inferior Rope of both Sympathetici maximi, and the common Arch of the Extremities of both Ropes.

The Intestines, in general, finish what the Stomach had begun. The alimentary Pulp, having been sufficiently prepared by the Succus Gastricus, or Lymph of the Stomach, undergoes a farther Change by the intestinal Lymph, Bile, and pancreatic Juice, by which the milky Liquor, call'd Chyle, is produced, and this Liquor render'd fluid enough to enter the lacteal Vessels through the Tunica Villosa of the small Intestines, while the grosser Portion of the Aliment continues its Course, and, becoming gradually thicker, as it advances towards the great Intestine, is there collected by the Name of Fæces.

The



The Dilatation of the Intestines is bounded by their common Coat. The undulating, successive, and periodical Contraction of the fleshy Fibres, especially of the orbicular Fibres of the muscular Coat, expresses the intestinal Lymph, beats it up into an Emulsion with the alimentary Paste, strains that Emulsion through the lacteal Vessels, and propels the Residuum.

The nervous Coat serves to sustain the Tunica Villosa, and, by the oblique Disposition of its Fibres, yields to the periodical Motions of the muscular Coat, without compressing the chyloferous Ducts, which pass through the Meshes of this Coat in the small Intestines.

The Length of the small Intestines gives a great Extent to what may be call'd the Strainer of the Chyle, and this Extent is very much enlarged by the numerous Folds termed Valvulae Conniventes. By means of this large Extent, there is a great Quantity of Chyle strain'd through these Intestines, and the Valves hinder the alimentary Pulp from passing through them too fast; that is, before all the milky Juice has been expressed; and this may be observ'd chiefly in the Beginning of the Intestines, where these Valves are most numerous and broadest, and the Aliment most fluid.

The Cavity of the great Intestines serves to receive the Faeces of the Aliment, and to contain a considerable Quantity thereof for a certain Space of Time, without any Inconveniency, and without being obliged to discharge them continually, which would be as great an Inconveniency as any. The Incurvation of the Colon, its Cells, and Contraction of its last Convolutions, contribute to this Retention of the Faeces; but the Cæcum seems to be the first Organ thereof, because the Faeces, being first collected there, are obliged afterwards to move in a contrary Direction as they ascend into the Colon.

The Valve of the Colon, which might more properly be term'd the Sphincter or Pylorus of the Ileum, hinders the Faeces from returning into the small Intestines: I say, the Faeces or gross Matter, because it is not certain, that this Valve entirely stops that Passage, or that it always hinders any fluid Matter, forced downward by the Colon, from entering the Ileum, even in a natural State.

The glandular Lacunæ of the great Intestines furnish continually a kind of Mucilage, which not only defends the internal Coat from the Acrimony of the Faeces, but serves also to lubricate these Faeces, in proportion to their different Degrees of Solidity.

The Appendicula Vermiformis is so very small in Adults, that its Use cannot be determined with Certainty. Perhaps the mucilaginous Matter in its Cavity, furnish'd by the numerous glandular Lacunæ of its internal Coat, which can only be evacuated by Plenitude, may, during its Stay there, contract an Acrimony, which may vellicate or stimulate the Cæcum, in order to throw its Contents into the Colon.

The Intestinum Rectum is the last Reservatory of the Faeces. The great Thickness of its muscular Coat, and the great Number of longitudinal Fibres, by which this Thickness is chiefly form'd, enable it to yield to the collected Faeces to so great a Degree, as to represent a large Bladder or Stomach. The Musculi Levatores Ani serve to suspend the lower Portion of this Intestine, especially when full; and it is partly by the Contraction of these Muscles, which overcome the Sphincter of the Anus, that the Faeces are discharged out of the Body. These Sphincters form the third Pylorus of the whole alimentary Canal.

The Mesentery and Mesocolon connect the Intestines in such a manner, as that they cannot be twisted or run into Knots, without hindering them from sliding, and yielding to each other, according to the different Postures of the Body, or according as they are more or less empty or full.

The Adhesions of the Mesentery form the Convolutions of all the small Intestines into a large Bundle, irregularly round, which fills a great Part of the Cavity of the Abdomen, from the Epigastrium downward.

The Mesocolon, by its Adhesion to the Colon, forms a kind of Septum Transversum, between the small Intestines and the Viscera contain'd in the Epigastrium; and this Septum supports the Liver and Stomach, under the Arch of the Diaphragm, just as much as it is sustain'd by the Intestines. This natural Situation of these Viscera is most commonly alter'd in dead Bodies, open'd after the common Method, and without the necessary Precautions.

The Breadth of the Mesentery and Mesocolon affords a large Extent to the Ramifications of the Arteries, Veins, and Nerves, distributed through them by innumerable Communications and Anastomoses; by means of which any Portion of the Intestines may be supplied, tho' the principal Branch, which leads to it, should happen to be compress'd or obstructed.

The cellular Substance, in the Duplicature of the Mesentery and Mesocolon, serves not only for a soft Bed to all these Ramifications, but also to contain those Collections of Fat necessary for the Formation of the Bile; and the cellular Substance of the Mesentery has likewise one Use peculiar to it, which is, to invest the Lymphatic Glands, and Lacteal Vessels; and, upon this Account, it is thicker than that of the Mesocolon.

The Lacteal Vessels being first form'd by a copious reticular Texture, round the Circumference of the Intestines, resembling the vascular Network of that Canal, and afterwards uniting every-where, thro' the Duplicature of the Mesentery, with the arterial Ramifications, which they likewise accompany in many Places; it is easy to conceive, that the Pulsation of the Mesenteric Arteries must propel the Chyle in the Lacteal Vessels, from the Intestines to the Receptaculum Chyli, that Motion being suitable to the Direction of their Valves. *Winflow's Anatomy.*

COELIACA Arteria. See ARTERIA.

COELIACA PASSIO. The Coeliac Passion: This is a Distemper not named by *Hippocrates*. *Aretæus* calls those afflicted with this Disease κοιλιακοί, and, *Cælius Aurelianus*; *Ventriculosi*. What *Celsus* calls the *Cæliacus Ventriculi Morbus*, is a Disorder very different from that which the above-mention'd Authors mean, and which the Moderns understand by the Coeliac Passion: For *Celsus*, *Lib. 4. Cap. 12.* describes the Disease as attended with an Induration and Pain of the Belly, entire Costiveness, insomuch that even Wind cannot be discharged, Coldness of the Extremities, and Difficulty of Breathing. That the Distemper meant by *Celsus* is very different from that understood by *Aretæus*, and *Cælius Aurelianus*, will evidently appear, from the Descriptions given by the last-mention'd Authors, compared with what is quoted from *Celsus*.

The Stomach, which is the Organ of Concoction, is disturb'd in the Exercise of its Function, when the Patient labours under a Diarrhoea, which is a Discharge of moist and crude Aliment. And if this Disorder proceeds not from a transient Cause, but continues for a Day or two, so as to render the Body weak for want of Nourishment, it becomes a chronic Disease, and is call'd the *Cæliac Passion*. The Cause of this Affection is a Debility of the concoctive Heat, and a Refrigeration of the Stomach, when the Heat is sufficient to dissolve, but not to concoct the Aliment, and convert it into a Juice proper for the Body, coming short of its End, and performing but half its Work through Imbecillity. The Concoction being thus left unfinish'd, the crude Aliment undergoes an Alteration for the worse, in Colour, Smell, and Consistence, being white, and destitute of Bile, of an ill Smell, like Mud, humid, and of no firm Consistence, for want of a due Elaboration, partaking of no more Virtue or Benefit from Concoction, than what was communicated to it in the Beginning.

Hence the Patient is molested with Inflations in the Belly, and continual and ferid Eructations, which, if they make their Way downwards, cause a Rumbling in the Intestines, with a Discharge of a rough, humid, argillaceous, and flatulent Matter, succeeded by an Efflux of something humid in Appearance. A severe Pain, like a pungent Sensation, is felt at the Stomach at Intervals. The Patient, in the mean time, falls into an Atrophy, and becomes lean, pale, weak, and incapable of discharging the Duties of his Calling; for, whenever he walks, his Strength fails him, and he is ready to fall down. The Veins of the Temples appear elevated, because of the Hollowiness of those Parts, thro' Want of Nourishment; and the Veins over all the Body are remarkably visible; for the Aliment is not only unconcocted in any due Measure, but, even in its crude and imperfect State, undistributed towards the Support of the Body; the Disease, in my Opinion, consisting in a Defect of Distribution as well as Concoction.

If the Disease increases, there is a Reflux from all Parts to the Stomach, succeeded by a Wasting of the whole Habit, a Dryness of the Mouth, and a Defect of Humidity or Sweat over the whole Superficies of the Body. Sometimes the Stomach is afflicted with a burning Heat, as from a fiery Coal; at other times it labours under a refrigerating Sensation, as from a Piece of Ice; sometimes at the End of the Stools there is an Efflux of yellow, pure, and unmix'd Blood, which seems to flow from the open Mouth of some Vein; for the Veins are corroded by the Acrimony of the Humour. This Disorder is of very long Duration, and difficult to be cured; for, tho' it should seem to leave the Patient without a manifest Cause, it returns upon him, whenever the least Error shall give Occasion for a Relapse, and performs the same Circuit over again.

This Disease is much incident to aged Persons, and to Women more than Men: As for Children, because of their daily Intemperance in Food, they have a continual Diarrhoea; but this proceeds not from any Disorder of the Stomach. The Summer is the Season in which this Distemper is most common; next to that, the Autumn; a very cold Winter also, by which the natural Heat is almost extinguish'd, is productive of the same. It proceeds also from long Illness, from a Dysentery, and a Lientery; and a greedy Draught of cold Water has been known to occasion this Disorder. *Aretæus, πρεσβ. αἰ. εἰς σφυ. χρο. παθ. Lib. 2. Cap. 7.*

The Disorder of the Stomach, which the *Greeks* call κοιλιακὴν, (*Cæliac*) took its Name from that Part of the Body which is affected (from κοιλία). The Cause of it is a continual preceding Indigestion, a vehement Inflammation, (*Tumor* in the

Lan-



Language of the Methodics) or a Dysentery. The Symptoms attending this Disorder are, a Variation of the Excrements, both in Quality and Colour; for sometimes they are of a thin and loose Consistence, at other times rough, unequal, and dense; sometimes they are white, sometimes like Camels Urine, sometimes yellow and sputuous, at other times porraceous, livid, black, purulent, or bloody, extremely fetid, and discharged with a Rumbling of the Intestines, which they call *βορβορύμις*, *Borborygmus*. The Stools appear full of Vesicles, or Bubbles, as from an Ebullition, and sometimes continually fatigue the Patient by Night as well as Day; sometimes they are discharged in great Quantities at Intervals, as once or twice in a Day, or at an Interval of one or two Days, or perhaps more; sometimes with a Tension, Inflation, and Gripings, or with Pain, or the Hiccough, a Compression and Contraction of the Skin which covers the Belly, a Thirst, great Heat of the Belly, and a slight cold Numbness in the interior Parts. These Symptoms are succeeded by Want of Sleep, Aversion to Food, and sometimes an extraordinary Appetite, Weakness, a whitish Paleness, and sometimes a Fever, and afterwards by an extremely fetid Smell of the Body, which is communicated to whatever is touch'd with the Hands, so as difficultly to be removed, with an Inflation of the Face and Feet. Sometimes a Dysentery attends this Disorder, the Intestines being very subject to Ulcerations, from the Acrimony of the Humours flowing to them.

This is a Disease of *Solution*, but sometimes complicated with a *Stricture*; for, by some of its Symptoms, as we may conjecture from what has been said, it seems to partake of both. *Caelius Aurelianus, Morb. Chron. L. 4. Cap. 3.*

By many of the Moderns the *Cœliac Passion* and *Lientery* are said to differ only in Degree: But the Difference seems to be more than they apprehend; for, in a *Lientery*, the Aliments are discharged crude and undigested; an Indication, that the Stomach is, through some Defect, unable to dissolve them: Whereas, in a *Cœliac Passion*, Chyle is discharged together with the Excrements; which shews, that the Stomach dissolves the Aliment, but that the Lacteal Vessels are by some means obstructed, so that the Chyle cannot pass thro' them, or that the Intestines are too much relax'd.

*Freind* distinguishes betwixt the *Cœliac Passion*, and *Chylous Flux*: The latter, says he, is caused by an Obstruction of the Lacteal Vessels; the former from Obstructions of the Intestinal Glands, on which account a sufficient Quantity of Lymph cannot, by these, be supply'd for diluting the Chyle, and rendering it fit to pass into the Lacteals; and hence it passes off with the Excrements. This, he says, is confirm'd by Dissections of People who have died of these Distempers.

The *Chylous Flux*, sometimes call'd by the Name of *Cœliac Passion*, when it proceeds from an Obturation of the Lacteals, is more or less dangerous, in proportion as the Obstructions are obstinate; upon the Removal of which the Cure depends. If these reside only at the Orifices of the Lacteals, the Cure is less difficult, than when situated deep in the Mesentery.

That Species of *Cœliac Passion*, which is caused by a Deficiency of the diluting Fluid, secreted by the Intestinal Glands, admits of more ready Cure than the other. But every Species, when it continues long, is attended with a great deal of Danger.

As the Cure of these Disorders, proposed by the Antients, with Astringents, must be very wrong, and likely to increase the Disease, I shall only specify that of *Aræus* as an Example.

If the Stomach cannot retain (*a*) the Food, but the Aliment passes thro' the Body unconcocted, unchanged (*b*), and crude, without contributing any thing to the Support of the Body, we call the Patients under this Disorder *Cœliaci*, as being affected with a Refrigeration of the natural Heat which serves for Concoction, and an Imbecillity of the distributive Faculty.

In this Disease the Stomach must, first of all, be relieved from its Pain by Fasting and Rest, which will procure a Return of the Strength; and, if the Stomach appears to be oppress'd with a Multitude of Humours, the Patient must vomit, fasting, with Water or Hydromel. It will be convenient also to cover and moisten the Part with greasy Wool, as an Astringent; or to anoint the same with Unguentum Rosaceum, Cœnanthinum, or Melinum; or, what is best, with Schœnanthinum, together with Hypocystis, or Omphacium (*see these Words in their proper Places*); and with these may be apply'd Cataplasms, warm to the Touch, and of an astringent Virtue. If the Disorder be attended with a Convulsion or Inflammation of the Liver, or Mouth of the Stomach, it will be proper to use Cupping and Scarifying, which have sometimes been found sufficient for a Cure; and when the Wounds, thus made, are, by the Application of Cerates, nearly cicatrised and consolidated, apply Leeches to the same. After these may be apply'd Epithems which help Concoction, such as that which is prepared of Seeds, with an Addition of the Root of Chamæleon. Bay-berries are also very proper in this Case, and also the green Malagma, and

that of our own Invention call'd *Mysterium*, which are of a mollifying and aperitive Quality, excite the natural Heat, and discuss Flatulences in the Viscera, which are all necessary Effects, in order to a due Constriction. Mustard also, the Limnætis, Euphorbium, and other Things of that Kind, prevent Refrigeration, and revive the natural Heat. The following Potions are also proper on account of their Astringency: First, we shall mention the Juice of Plantain, with the astringent Water of Myrtle-berries or Quinces. The Kernels or Stones of unripe Grapes, and Wines of the most astringent Quality, are also very proper on this Occasion. Then let the Patient take some Potion, which is of a heating Nature to his Belly, such as is prepared of Ginger, Pepper, and the Seeds of wild Parsley, which grows on the Rocks, all well mix'd together, with Theriaca. If these Remedies are of little or no Service, vomit with Horse-radish; and if with these you infuse the Root of white Hellebore, for one Night, you will be provided with an excellent Cathartic, which will cleanse and evacuate cold Humidities, and revive the natural Heat.

As to Diet, and Way of Living, the Patient must be very regular: Let him sleep in the Night, and spend the Day in walking about, in exercising his Voice, and being carried thro' Groves of Myrtles and Bay-trees, or over Fields thick-set with Thyme; for a free Perspiration, and Breathing in so sweet an Air, are a great Help to Concoction. Then let him betake himself to Gymnastics, as Frictions, artificial Motions of the Arms, and throwing of Weights, in order to exercise the Breast and Stomach. Let him drink well; for Bread will contribute very little towards the Restoration of his Strength. *Aræus, περὶ διαταρ. χρο. παθ. Lib. 2. Cap. 7.*

*Dr. Freind* says, that the most rational and successful Method of treating the *Cœliac Passion* is to administer such Remedies, as gently stimulate the Intestinal Tube, and deterge the obstructed Glands. For this Purpose gentle Purges, administer'd in small Quantities, and frequently repeated, are recommended, and gentle Vomits of Ipecacuanha. See *LIENTERIA*.

#### CELIFOLIUM.

This Substance, to which *Paracelsus* gave the Names of *Nostoch* and *Cerēsfolium*, and which is by others call'd *Cœli Flos*, *Cœlifolium*, and *Flos Terræ*, appears to be a Species of Jelly, sometimes clear, sometimes greenish, and agitated with a kind of tremulous Motion so long as it is fresh. It is most generally found, after Rain, in Meadows, and in dry parch'd and sandy Soils. It most commonly appears between the vernal and autumnal Equinoxes. It must be gather'd before the Rising of the Sun; since, by the Heat of its Rays, it is so dried and shrivel'd up, that nothing of it remains, except some Membranes of a brownish Colour.

Its real Origin is much controverted; some imagine, that it falls from the Heavens like Dew, and is the Excrement of some Star; whereas others are of Opinion, that it is a Species of Plant, or some Production of the Earth.

*Mr. Magnol*, in his *Botanicum Monspeliense*, has call'd it *Muscus fugax Membranaceus Pinguis*; and *Mr. Tournefort*, in his *Traité des Plantes des environs de Paris*, has given it the Name of *Nostoch Cinifionum*. I believe they are the only two Botanists who have rank'd it among the Number of Plants.

I thought it incumbent upon me to take a View of this Substance in its various States, and at its different Ages, in order to convince the World, that it is a Production of the Earth, to which it adheres by one or more slender Roots. The Embryo, then, of this Plant, at first, appears like a small Tubercle, which is fleshy, soft, and diversify'd with inconsiderable Inequalities, like these observed on Strawberries. It is of a greenish-brown Colour, but becomes clear, in proportion as its Membrane is enlarged. This Membrane, at last, appears entirely unfolded on the Earth, in which it sometimes leaves the Impression of its Cavities.

When it is arrived at this State, it remains in it so long as the Weather is moist, and does not fade till the Wind and Sun dry the Earth, and consequently deprive it of its proper Nourishment.

In its natural State I have generally found it folded lengthways; and it appear'd to me, that its two Ends form'd, at their joining, a Species of membranous Assemblage or Bundle.

In the Year 1667. *Mr. Ducloux* presented to the Academy a clear and insipid Water distil'd from the *Cœlifolium*, which gave a whitish Colour to the Solution of corrosive Sublimate.

In the Year 1678. *Mr. Bourdelin* subjected it to a more accurate Analysis, extracted from it not only a great deal of Phlegm, but also a pretty large Quantity of fetid Oil, and volatile Salt, which was either concreted, or dissolved in the Liquor.

The Analysis, to which I myself subjected it, quadrates pretty exactly with those instituted by the above-mention'd Gentleman. I first obtain'd from it a very clear and insipid Liquor, which render'd the Solution of corrosive Sublimate white, and the Syrup of Violets green.

(a) For ἀκρωτός, I read ἀκρωτός.

(b) For ἀδυσπλότος, I read ἀδυσπλότος.



The other Liquors I extracted from it, confirm'd what I had before remark'd with respect to the first.

At last, I obtain'd from it a beautiful volatile Salt, concreted, and well crystallized on the Sides of the Receiver; as also a volatile urinous Spirit; and a fetid Oil. The *Caput Mortuum*, when calcin'd and lixiviated; furnish'd me with a very small Quantity of fix'd Salt, and was also impregnated with Earth. It gave a faint yellow Colour to the Solution of corrosive Sublimate, changed the Syrup of Violets, and render'd it of a greenish Colour.

If this Plant is suffer'd to ferment by itself, in a close-stopt Vessel, it becomes putrid, and is dissolved into a pretty fetid Liquor, which, at the End of twenty Days, is of a redish; and ten Days after of a bluish Colour.

I observed, that, even after a considerable time, one of these Liquors was an Acid, and the other an Alkali. The red Liquor had no Effect upon the Solution of corrosive Sublimate, and only produced a faint and almost imperceptible Red in the Syrup of Violets: The blue Liquor gave a white Colour to the Solution of corrosive Sublimate, and render'd the Syrup of Violets green.

Uncommon Virtues are, by some, ascrib'd to the *Cœlisolum*. The Country-people in *Germany* use it to make their Hair grow. It is also accounted excellent in Cancers and Fistulas. A *Swiss* Physician reduced it to a Powder, of which he exhibited two or three Grains, in order to lessen and allay internal Pains. He also apply'd it externally for the Cure of Ulcers.

The *Cœlisolum* is an Ingredient in the *Spermiolum Compositum Cnæselii pro Principe van Eggenberg*, which is describ'd in the *German Ephemerides* for the Year 1676. among the Secrets of *Cnæselius*.

Some Chymists imagine, that the *Cœlisolum* contains the universal Spirit. They also extract a mild Spirit from it, to which they ascribe uncommon Virtues, and which they believe to be the radical Menstruum, or Solvent of Gold.

The Water is distil'd from it either by the Heat of the Sun alone, or by a very slow Fire, by the Action of which it is raised very fast. This Water is generally accounted a very mild Dissolvent. It is by some said to be an admirable Remedy for alleviating Pain, and curing Ulcers, however obstinate and rebellious they may possibly be. *Mem. de l'Acad. Roy. des Sciences, Anno 1708. by M. Geoffroy the younger.*

This is generally call'd by the Country-people *Star-fall*, and is thought to be what is vomited up by some Animals, which live on Frogs or Fish, as the Heron, or Bittern.

CCELOMA, κοίλωμα. See BOTHRIUM.

CCELOSTOMIA, κοιλοστομία, from κοίλον, hollow, and στόμα, the Mouth. A Defect in Speaking, when a Person's Speech is obscur'd, by sounding as if his Voice proceeded from a Cavern.

CCELUM. The Air, or Climate.

CCEMENTATIO. CEMENTUM. See COEMMENTUM.

CCENA. Supper. Most Authors advise Suppers to be eaten at a sufficient Distance of Time from going to Bed: They should consist of easily digestible Aliment, and never exceed in Quantity. Valetudinarians should, in a particular Manner, observe these Rules, which are also of some Importance to those who use but little Exercise.

CCENOLOGIA, κοινολογία. A Consultation of Physicians.

CCENOTES, κοινότης, from κοινός, common. I know of no *English* Word which will express the Meaning of this. The Physicians of the Methodic Sect asserted, that all Diseases arose from Relaxation, Stricture, or a Mixture of both. These were call'd κοινότητες, what Diseases have in common.

COFFEE. The Plant which bears Coffee-berries is thus distinguished:

COFFEE, Offic. *Coffea Frutex*; ex cujus fructu fit potus, Raii Hist. 2. 1691. *Jasminum Arabicum, Cassanea folio, flore albo odoratissimo cujus fructus Coffy in Officinis dicuntur*, Comm. Plant. Usu. 85. Boerh. Ind. A. 2. 217. *Frutex Coffea*, Ad. Reg. Soc. Lond. 208. p. 61. *Arbor Ymensis fructum Coffe ferens*, Dougl. p. 2. *Euonymo similis Ægyptiaca fructu haccis Lauri simili*, C. B. Pin. 428. *Bon arbor cum fructu suo Buva*, Park. Theat. 1622. *Bon Alp. Ægypt. 63. Vestlinge Obs. 21. Bon vel Ban Arbor*, J. B. 1. 422. *Bon vel Ban, ex cujus fructu Ægypti potum Coava conficiunt*, Pluk. Almag. 69. Phytog. 272. THE COFFEE-TREE.

This is a low shrubby Tree or Bush, which grows in *Arabia Felix*. It is a Species of Jasmine, according to *Commelin*, having very sweet odoriferous Flowers, like those of Jasmine. The Leaves are about four Inches long, and two broad in the Middle, decreasing gradually till they become sharp at both Ends. The Flowers come forth at the setting on of the Leaves, and are succeeded by Berries, each of which incloses two Seeds in an inner thin Skin, being oval and roundish on the one Side, and flat on the other, with a Sulcus running thro' it. *Miller's Bot. Off.*

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The Coffee-shrub is propagated from a Seed which must be sown very recent. Some have affirmed, that the *Arabians*, from a Principle of Envy, will not permit the Seeds to be exported from their own Territories, till they have destroy'd their Buds either by Fire or boiling Water, lest they should serve to propagate the Coffee-shrub in other Countries; but this is a palpable Mistake; for the *Dutch* found means to import fresh Coffee-seeds from *Arabia Felix* into *Java*, where they produc'd the Coffee-shrub in such Perfection, that it bore very good Fruit. When some of the *Java* Seeds were imported into *Europe*, first the Physic-garden at *Amsterdam*, and then that at *Paris*, produc'd the Coffee-shrub: And, at present, this *Arabian* Seed is sown and propagated in several Gardens of *Europe*. But this groundless Charge against the *Arabians* is justly apply'd to the Governors of *Surinam* in *America*; who, by a Statute, have made it Death to export the Coffee-seeds from their Territories before their Buds are burn'd; but the *French* fell upon Expedients to frustrate their Statute; for, finding means to import these Seeds in their natural State into the Island *Cayenne*, they there cultivate their belov'd Shrub with great Success.

These Berries, when dry'd in the Sun, are much us'd almost in every Part of the habitable World, for preparing, by Infusion or Boiling, that celebrated Liquor known by the Name of *Coffee*. The first among the *Europeans*, who wrote on the Use of these Berries, were two Physicians; *Rauwolfius*, a Native of *Germany*; after he had finish'd his Travels thro' the *East*; and *Prosper Alpinus*, an *Italian*, after he had for some time resided in *Egypt*, which borders upon *Arabia Felix*. Because the Coffee-shrubs, cultivated in the cold Gardens of the *Europeans*, do not yield a Quantity of Berries sufficient to answer the Consumption, we are obliged to have them imported not only from the *Arabians* under the Name of *Levant Coffee*, which is the smallest of all the other Kinds; but also from the *Dutch* in *Java*, under the Name of *Java* or *East India Coffee*, which is the largest, and of a whitish livid Colour. These Berries are also imported from *America*, under the Name of *English* or *Surinam Coffee*; and the Berries of this Kind are indifferently large, and of a greenish Colour. They are also sometimes imported into *Europe* from a *French* Settlement in *Africa* call'd *Bourbon*, under the Name of *French Coffee*. But those Coffee-berries or Grains are accounted best which are small, and of a greenish Colour, which are not corrupted by Moisture or Mouldiness, which are recent, and affect the olfactory Nerves with a Smell resembling that of Hay, which have an herbaceous grateful Taste, which are of a very close Consistence, and somewhat transparent, since 'tis reported; that the Berries of this Kind are capable of being preserv'd for five or six Years. The *Levant Coffee* is generally prefer'd to the other Kinds; but some, with good Reason, affirm, that the Berries imported into *Europe* from *Surinam* in *America* are the best, because they may be had more fresh and recent than those imported from other Parts.

We shall now inquire in what Manner the several Nations, from whom we receive the Coffee-berries, prepare them; what Effects they promise themselves from their Use, or on what Accounts they recommend them; and, lastly, what may reasonably be asserted with respect to the Medicinal Virtues and Use of Coffee.

The *Arabians* then triturate the Coffee-berries in an open Earthen Vessel, immediately after they are roast'd; then, pouring boiling Water upon them, they boil them for some time, and drink the Liquor forthwith, not waiting till its grosser Parts subside: But some of them, as soon as the Vessel is taken off the Fire, wrap it up in a wet Linen Cloth, in order to produce a Precipitation of the gross Parts; by which means they drink their Coffee clear and fine. The Men of Note and Distinction among the *Arabians* do not use the Berries themselves, but the seminal Capsulas, and the Pellicles immediately covering the Berries, which produce a Liquor of a grateful Taste, and free from Bitterness. But, for this Purpose, these Capsulas and Pellicles must be very fresh and recent. This Species of Coffee is, by the *French*, call'd *Café à la Sultane*. When the *Arabians* are ask'd, what Reasons induce them to drink Coffee so liberally as they do, they generally answer, that they are, from Experience, convinc'd of its being possess'd of nutritive Qualities, and such as render them Proof against various Disorders. But they seem principally addict'd to the Drinking of this Liquor, for no other Reason, than that by so doing they may pass the Time agreeably. The Chevalier *D'Arvieux*, in his *Memoires*, informs us, that this Liquor is absolutely necessary for all those, who, like the *Arabians*, are distract'dly fond of Opiates and Narcotics. The *Egyptians* also esteem the Coffee, prepared from the seminal Capsulas and Pellicles, more rich and efficacious than that produc'd by the Berries themselves. The *Egyptians*, as well as the *Arabians*, use warm Coffee very frequently throughout the Day; but, in a particular Manner, they drink large Quantities of it in the Morning for Breakfast; for, as *Alpinus* informs us, the *Egyptians* find from Experience, that the Stomach is warm'd and corroborated, and Obstructions of the Viscera remov'd, by the Use of Coffee. It is a speedy and efficacious Remedy for provoking the Menstrues; and, among the *Egyptians*,



*Egyptians*, those Women, in whom they flow too sparingly, drink large Quantities of it pretty warm, sipping it up by little and little; which is the manner of drinking it among them all. After an universal Evacuation of the Body, Coffee, drank upon an empty Stomach, especially in the Morning, effectually provokes the Menfes, and affords instantaneous Relief in Cafes where they are discharged with violent Pains, and in too small a Quantity. In order to prepare their Coffee, they take of the Berries, freed from the Capsulas, a Pound and an half, or eighteen Ounces: These they roast a little over a Fire, and, when roasted, boil them in twenty Pints of Water. Some of them suffer their Berries, when roasted and tritured, to remain a Day in Infusion with Water. Others, without any previous Infusion, boil them to a Consumption of half the Water, strain the boil'd Liquor off, and keep it for use in Earthen Vessels, close stop'd. They prepare Coffee from the Capsulas of the Seeds in the same Manner; but, for that Purpose, use a smaller Quantity of them; for some take only six, and others nine Ounces of them, which they boil in twenty Pints of Water, till half of the Liquor is consumed. According to *Veslingius*, the *Egyptians* prepare Coffee either from the Seeds alone, or from the seminal Capsulas alone, or from both together. In order to prepare it both with the Seeds and their Capsulas, they must be powerfully dried, and even a little torrify'd in a Stove, that by this means they may become capable of being reduc'd to a Powder. This Liquor is, among the *Egyptians*, boil'd in well-tin'd Kettles, plac'd in Furnaces elegantly built for this Purpose; and the Fire, by which the Operation is perform'd, consists of the Excrements of Animals made up into Balls with Straw. *Alpinus* informs us, that some, who love their Coffee rich, use a smaller Quantity of Water than that already specify'd; whereas others, who choose it weak and thin, employ a larger Quantity of Water in preparing it; that there is no Necessity for straining the Liquor; and that, in the Coffee-houses, some of them add a small Quantity of the fresh Powder immediately when this weak Decoction is intended for Use. *Alpinus* informs us, that this Liquor is highly beneficial to the Stomach. An Ounce or more of it, prepared with boiling Water, is by them sup'd in the Morning on an empty Stomach; for they are observ'd to be as fond of Coffee as our Countrymen are of Debauches of Wine in a Tavern. According to *Veslingius*, in the City of *Memphis*, now call'd *Grand Cairo*, Coffee is sold, in some thousands of Taverns, to large Multitudes of Persons, who sup it warm either as an Amusement, or for the sake of Health, especially when the Heart and Stomach are languid. Some correct the Bitterness of the Coffee with Sugar, and candy the Seeds themselves by way of Sweetmeat. This Practice obtains not only in *Egypt* itself, but also in the several Provinces of the *Ottoman Empire*. It is impossible to believe what large Quantities of it are drank by Companies of idle Men, who, drinking Coffee and smoking Tobacco by turns, consume whole Days in the public Houses: And because, according to the same Author, the Capsulas are possess'd of a certain Acidity, whereas the Seeds themselves are palpably bitter to the Taste, they neither create a Nausea, nor overheat the Stomach, tho' drank in a pretty large Quantity, provided they be roasted and tritured in a Marble Mortar with a Wooden Pestil. During the Heat of the Summer, the Decoction of the Capsulas is most properly exhibited to feverish Patients. On the contrary, in Cafes where cold and viscid Humours obstruct the Viscera, and several Ducts of the Body, a Decoction of the Seeds themselves, roasted and ground, is preferable to the other; but Moderation in the Use of both is by no means to be neglected. This learned Gentleman thinks, that the Fruit *Cafe*, and its Decoction *Caova*, are, probably, so call'd from their cherishing and comforting Qualities. Hence, in the Mouths of Foreigners, arose the Names *Caova alcaova*, *Chaova Choube*, *Cave* and *Cafe*; and he confesses, that, by means of this Liquor, he has often restor'd the Stomach, become languid by drinking Water, when Wine could not be had for that Purpose. He also asserts, that it proves beneficial in Disorders of the Head, which is frequently affected in consequence of its Consent with the other Parts of the Body. We must here observe, that, according to others, the *Arabic Word Caboua*, which is the Infinitive of a Verb signifying *to labour under a lost Appetite*, denotes not only Wine, but also every kind of Liquor, and consequently Coffee. Hence the *Turks* derived their *Cahveh*, from which again comes the *European Word Cafe*. According to *Rauvigne*, we learn from *Rauwolfius*, that Coffee is very much used among the *Turks* as well as the *Egyptians*. The Proportion they observe, with respect to the Ingredients, we are taught by *Du Mont*, who informs us, that, to twenty Parts of Water, estimated by Measure, they take one Part of the Powder of the Berries, compressed with the Hand. The richer Sort to every Dish add a Drop of the Essence of Amber; others boil in their Coffee, Cloves, others the Anisum Stellatum, and others the lesser Cardamoms. In *Holland* the Juice of Li-quorice, obtain'd by boiling with Water, is sometimes added to the Coffee; but this Liquor, all over *Europe*, is most commonly adulcorated with Sugar, which by some is used for that Purpose in so large Quantities, as to transform the Coffee into a kind of

Syrup, which affects the Palate with no other Taste than that of the Sugar. There are some who drink their Coffee with new Milk or Cream alone; but most are directed in the Quantity of this Liquor they use, either by Custom or Appetite. But 'tis needless to dispute about the Method of preparing this Liquor in *Europe*, since the Method used by each Country is most acceptable to itself. *M. Jussieu*, in his Answer to that Question propos'd in the Schools of *Paris*, A. 1716. Whether the Use of Coffee is salutary to the *Literati*, and Men of a studious Turn, uses the following Words: "The Berries, when clean, and stript of their Capsulas, are roasted in an open Earthen Vessel, rather than in a cover'd one of Brass or Iron. They are to be roasted to such a Degree as to become of a bluish-black Colour. As Occasion requires, they are more commodiously ground in what we call a Coffee-mill, than tritured in a Mortar. An Ounce of Coffee, thus prepared, is sufficient for impregnating a Pint of Water; and this Proportion has, for forty Years past, been generally observ'd in *Europe*;" but some use a far less Quantity of the Coffee. Thus *Meisner* orders only about three Drams of it for ten or twelve Ounces of Water. Coffee-grains are roasted, that by the Action of the Fire they may be open'd, and dispos'd for yielding their Tincture; as also that the flatulent Qualities, common to all farinaceous Substances, may by that means be corrected. These Seeds, when roasted, ought not to be ground till they are just about to be used, because they are, in the very Nature of the Thing, less subject to Exhalation when entire, than when tritured. In order totally to prevent this Exhalation of their volatile Parts, 'tis highly proper they should not even be roasted till they are to be used. From this *Du Mont* seems justly to conclude, that 'tis better to roast them in a cover'd Vessel, than in one which is open, as Mr. *Jussieu* directs.

We now come to inquire, what the particular Nature of Coffee-berries is, and what Virtues and Properties the Liquor prepar'd from them is possess'd of. According to *Stenzelius*, in his *Toxicologia*, Sect. 3. the celebrated *Taury*, by means of a Chymical Analysis, obtain'd from Coffee-berries a volatile Salt, a fix'd Salt combin'd with a large Quantity of Sulphur, and an earthy Substance. According to *Le Fevre*, *M. Du Tour*, with an Intention to discover the constituent Parts of Coffee-berries, put a Pound of them into a Glas Retort, cover'd with Clay, to which he adapted a large Receiver, luted the Joinings, and applied a Fire gradually. In this Process a limpid Phlegm was first discharg'd Drop by Drop; then Vapours or Clouds appeared in the Receiver, which were at last converted into an Oil, which was first of a redish, and then of a blackish Colour. The Smell of the Coffee exhal'd thro' the Joinings, tho' cover'd with Cement, and diffus'd itself thro' all the Laboratory. When the Vessels were become cold, only half a Pound of the various Elements of the Coffee-berries was taken out of the Receiver, that is, two Ounces and five Drams of a black Oil, which, when rectify'd, assum'd an Amber-colour; an Ounce and three Drams of a volatile Spirit; and four Ounces of a Caput Mortuum, which, by Elixivation, afforded a Dram of fix'd Salt. *Boeclerus* informs us, that one Pound of Coffee-berries, by a Chymical Analysis, yields about four Ounces of Phlegm and volatile Spirit, and of Oil one Ounce, a Caput Mortuum of above four Ounces being left, whilst the other Parts were evaporated and carry'd off. *M. Bourdelin*, in a Chymical Analysis made by a Retort, from three Pounds of the best Coffee-berries obtain'd twenty Ounces and seven Drams of a Liquor, in which there was a large Quantity of an Acid, mix'd with an oleous sulphureous Principle, as was discover'd by various Proofs and Experiments: A large Quantity of Oil was also extract'd, that is, eight Ounces and two Drams, not in a liquid, but in a concreted Form. The Caput Mortuum was of a larger Bulk than the Berries originally employ'd, and an Ounce and sixty Grains of a fixed Salt were extract'd from it. *Houghton* says, that, by Distillation from a Retort, a Pound of clean Coffee-berries yielded six Ounces and six Drams of Phlegm, of a very thick Oil two Ounces four Drams and two Scruples, whilst five Ounces and three Drams of a Caput Mortuum remained. He informs us, that both the Oil and the Phlegm were of an ungrateful empyreumatic Taste, but the Caput Mortuum was insipid, incapable of being calcin'd to Ashes, and probably destitute of every kind of Salt. The like Analysis, instituted at the same time upon common Beans and Grains of Wheat, demonstrated, that the Quantity of Oil obtained from the Coffee was almost double that obtain'd from the Beans, and almost triple of that obtain'd from the Wheat. *Caspar Neumannus*, from one Pound of Coffee, subjected to Distillation by an open Fire, obtain'd five Ounces five Drams and an half of distil'd Phlegm, six Ounces and half a Dram of a thick fetid Oil, whilst there remain'd four Ounces and two Drams of a Caput Mortuum, which, by Incineration and Elixivation, yielded three Drams of a fixed Salt. From these Experiments 'tis obvious, that, by subjecting Coffee-berries to Distillation, we obtain Phlegm, Oil, and an earthy Substance; from which, besides, every one, except *Houghton*, by Elixivation, procur'd a fixed Salt. But Authors vary in their Proportions of the Substances now said to be



be yielded, according as greater or less Care has been taken in the several Distillations they have made. The Method used by *Newman* seems to be the most accurate, since, in the Products, he obtained the entire Weight of the Coffee-berries originally subjected to the Analysis. But 'tis to be lamented, that, whilst he recounts the Experiments of others, which have been either less accurately perform'd, or less clearly and distinctly represented, he attacks their Characters with a haughty and supercilious Air, which ill becomes a Man of Learning. Except *Bourdellin*, none of the others make mention of an Acid among the Products or Substances yielded by the Coffee-berries. But that this Acid is lodged in the Oils possessed of a thick Consistence, like that of Balsams, is sufficiently plain; and *Newman* himself does not deny, that an Acid is lodged in Coffee-berries, granting at the same time, that the alkaline Parts are, by the protracted Action of the Fire, generated during the Distillation. If we observe, that it is usual with most Chymical Authors, by taking the Whole for a Part, to give the Name of a sulphureous Principle to that, which they intend should be looked upon as an oleous one, we shall perceive, that these Authors did not deserve to be chastised in so contemptuous a Manner by *Newman*. But let us inquire what this Gentleman has discovered with respect to the Nature of Coffee-berries, by the Application of aqueous and spirituous Menstruums: By Digestion and Coction with distil'd common Water, from two Ounces of Coffee-berries, he obtained five Drams of an aqueous Extract; and, from the remaining Magma, with highly rectified Spirits of Wine, he obtain'd twenty-six Grains of a spirituous Extract. As soon as he added the Spirit of Wine, he obtained three Drams and an half of a spirituous Extract; and, with Water, afterwards extracted from the remaining Matter two Drams of an aqueous Extract. When the rectified Spirit of Wine was distil'd from the Coffee-berries, it came off without any Change, and the Water employed also came over in a State scarce different from that of common distil'd Water. From what has been said, we may infer, first, that Coffee-berries abound both with resinous Parts, to which the Spirit of Wine proves a Menstruum, as also with Parts of a gummous Nature, capable of being dissolv'd by Water. Secondly, that, in these Berries, the latter Parts are more numerous than the former. Thirdly, that both the resinous or oleous, and the gummous or saline Parts in Coffee-berries are of so fix'd a Nature, as to require a stronger Degree of Fire, than that by which the Spirit and the Water are raised.

We now come to inquire, what Properties these Berries discover, or what Principles they yield, when roasted.

Mr. *Bourdellin* then, from three Pounds of Coffee-berries, roasted in the ordinary Manner, so as to weigh no more than two Pounds and an half, obtain'd, by Distillation with a Retort, ten Ounces or more of a Liquor, containing a manifest acid and a sulphureous Principle; that both of them were manifestly discover'd; but, in the last two Ounces and an half of this Liquor, there was a larger Quantity of volatile Salt, than in the rest of it; for it produced a very considerable Effervescence with Spirit of Salt. It contain'd six Ounces and six Drams of an Oil, and nine Drams and an half of fix'd Salt.

To these Experiments we may add, that, when Coffee-berries are roasted, a pinguious or oleous Kind of Substance is observ'd to be discharged from them by way of Sweat. This Substance appears on the Surface of the Decoction or Infusion of these Berries in Water; and the *Turks*, when they can have it, swallow it very greedily. From what has been said, it is obvious, that, by being roasted, the Coffee-seeds become better disposed for yielding their gummous, as also their resinous Parts, than when they are crude. In roasted Coffee-berries therefore we are furnish'd with earthy Parts, which remain undissolvable after the Extracts are made, as also with Parts of a gummous and oleous Nature. The Infusion or Decoction of Coffee commonly used may therefore be consider'd as containing a gummous Extract, impregnated with oleous, fix'd, and volatile Parts, perceptible to the Eye and Taste, and which, in consequence of these furinaceous Berries being roasted, are disengag'd and mix'd with the boiling Water. From what has been said, we may justly conclude, first, that Coffee is possessed of the diluting Virtues of warm Water. Secondly, that it is furnish'd with the emollient and moderately nourishing Qualities of farinaceous and oleous Substances. Thirdly, we may conclude, that, in consequence of its volatile Principle, it contains Parts, which stimulate the Fibres, and rouse the animal Spirits. And, fourthly, that its oleous, in Conjunction with its saline Principle, acts by way of natural Soap, with which when the Water is impregnated, it becomes capable of mixing with the Mass of Blood, and operates by its resolving and abstergent Qualities. The other Virtues of Coffee are to be determin'd by the several Substances, which different Persons, according to their respective Tastes, use in preparing it. Hence we may justly affirm, that Coffee contributes to Watchfulness, and the banishing Sleep; that it allays Thirst, and checks that preternatural Heat, which attends Fevers and Surfeits; as also, that, in Head-achs arising from Congestions of Blood in the Head, it helps to drive the

Humours to the inferior and less noble Parts. *Le Fevre* gives his Opinion of Coffee in the following Words: "I am of Opinion, says he, that Coffee is proper for the Cure and Prevention of comatous Disorders, arising from a Phlegm, or a too viscid Blood. Besides, this Liquor, in consequence of its assisting Chylification and Sanguification, increases the Quantity of the animal Spirits, and repairs the Loss of them arising from preternatural Watching. Coffee also, in consequence of its volatile Salt, removes Obstructions of the Brain, dries up its superfluous Moisture, and consequently restores a due Degree of Elasticity to its Membranes and Vessels. Since therefore this Liquor contributes so much to the Secretion of the Spirits, it is no surprising Thing, that those who, with an Intention to watch, drink Coffee after Supper, should bear it out for several Days and Nights, without any considerable Loss of Strength; and that this Liquor should be classed among the antiapoplectic Medicines, since, by its Means, Obstructions are removed, the Spirits put into a brisker Motion, the Blood rendered fitter for a due Circulation, the Languor of the solid Parts overcome, Drowsiness carried off, and the Mind rendered gay and chearful." The deobstruent Virtues of this Liquor, according to *Prosper Alpinius*, are confirmed, by the Resemblance its Taste bears to that of a Decoction of Succory. That apoplectic Patients have been rous'd by injecting Clysters of Coffee, we learn from the *Hist. de l'Academie Royale des Sciences* for the Year 1702. From what has been said, we may justly infer, that this Liquor is proper for Persons of a studious Turn, who, by close and intense Thoughtfulness, perceive their finest Humours dissipated, and the Tone of their Fibres destroy'd; whence arise Imperfections of the first Digestion, hypochondriac Flatulencies, a Diminution of all the Secretions and Excretions, a Paleness of the whole Body, Languors, Weakness, and their several concomitant Symptoms. Nothing more effectually contributes to prevent these Disorders, than Coffee, as the learned Mr. *Jussieu* has sufficiently demonstrated. To these we must join the concurring Authority of the incomparable *Bagliovi*, who delivers his Sentiments, with respect to Coffee, in the following Words: "I must, says he, observe, that Coffee is an infallible Secret for removing that Species of Head-ach, which, in consequence of a bad Digestion, arises some Hours after Dinner. This Effect I have seen produced by Coffee in Numbers of Patients at Rome, and I daily find the Observation verified in myself; for, since my Stomach is render'd weak, and I begin to be afflicted with a Head-ach, Listlessness, and Melancholy, about three Hours after Dinner, in consequence of close Thinking, too extensive Practice in visiting the Sick, and indefatigable Industry in describing the Natures of their several Diseases, a thing absolutely necessary to the Practice of Physic, I miraculously free myself from these Disorders, which proceed from a weak Digestion, by drinking two or three Dishes of Coffee. I sometimes use Tea or Chocolate, but not with such Advantage as arises from Coffee, which is an efficacious Medicine for Disorders of the Stomach, and the Diseases arising from them; whereas Tea is calculated for Disorders of the Head." *Le Fevre*, with an Intention to confirm these Sentiments, uses the following Words: "Coffee is beneficial to those, who are listless, who use thick and viscid Aliments, and who abstain entirely from Wine. The Method of Living used by the *Turks* is a sufficient Proof, that the Digestion of the Aliments is greatly promoted by Coffee; for tho' they live upon Pulses, Fruits, Preparations of Milk, and unleaven'd Bread not sufficiently bak'd, yet they are very rarely subject to Disorders of the Stomach." I might add, that this Liquor seems, in a manner, necessary to the *Turks*, because they daily use so large a Quantity of Opium, which is a powerful Narcotic. *Henricus Schulzius*, in his *Dissertatio de Rebus non-naturalibus*, tells us, that it may safely be affirmed, that Coffee, drank warm within an Hour after Dinner, is highly proper for those who are afflicted with Head-achs, in consequence of a Weakness of the Stomach, contracted by close Thinking, and constant Study. It is also much recommended against Head-achs contracted by Drunkenness. *Lewenhoeck*, in *Epist.* 120. uses the following Words: "If, says he, I happen at any time to sup more sumptuously, eat more liberally, or drink a larger Quantity of Wine, than usual, next Morning, by way of Medicine, I use a somewhat larger Quantity of Coffee, than at other times. This Liquor I drink as hot, and as quickly, as I possibly can; by which means a universal Diaphoresis is generally excited. By this Expedient, I endeavour not only to expel the Matter, which, in consequence of my having eaten or drank too much, proves hurtful to my Blood, but also to supply its Place by the Coffee, which I edulcorate with Sugar-candy. If, by this Method, I cannot restore myself to Health, none of the Medicines in the Shops can, in my Opinion, effect it. This was also the only Medicine I used some Years ago, when I perceiv'd myself feverish; only I sometimes used Tea, in order to excite a Diaphoresis." In the *Ephemerides Nat. Curios.* Decad. 2. a. 3. 198. we have an Account of an inveterate Cephalaea cur'd



by Coffee. In the same Work, *Dec. 2. a. 8. v. 5.* we are inform'd, that Coffee, drank thrice a Day, prov'd an effectual Remedy for a Vertigo; and in *Eph. Nat. Curios. Vol. 1. 44.* we have an Instance of a Diarrhoea remov'd by Coffee. Because anodyne Effects have often been produc'd by this Liquor, in consequence of its diluting and aperient Qualities, some have imagin'd, that it was the Medicine used by *Helen* for banishing Grief, to which *Homer* gives the Name of *Nepenthe*: But others are of a different Opinion. There are also others, who, according to *Muralus*, extolling Coffee for its Antiquity, call it the *Jus nigrum* of the *Lacedaemonians*. Thus we have taken a View of the Virtues of Coffee, which, in general, for daily Use, seems more proper for Persons of phlegmatic Constitutions; than for Patients of choleric Habits, such as are extenuated, and those whose Blood is easily put into Commotions; for these are injur'd by using it too frequently, and most effectually consult their own Health by drinking it weak, with Milk, and a little good toasted Bread, drinking a Glass of cold Water previously. By this means the Stomach is corroborated, and fortified against the weakening Qualities of the warm Water, the Digestion of the preceding Meal is promoted, and the Body is rendered soluble. Some, with an Intention to restore the Strength and Tone of the Stomach, put some Aromatics, such as Cinnamon, in their Coffee; but they, who love their Coffee rich, and drink it with Milk or Cream, use a Liquor, both of whose Ingredients are of a nutritive Quality. The celebrated *Lanzoni* prescrib'd Coffee, prepar'd with Milk instead of Water, as a Medicine; and highly extols it in Asthmas, beginning Hectics, the Gout, the Pleurisy, the hysterical Passion, the Rheumatism, and Barrenness in Women. In preparing it, the Milk of Asses, Cows, or Goats, may be used, as the State and Condition of the Patient require. But we are not to conceal the Disadvantages generally arising from an immoderate and too liberal Use of Coffee. Many then, after the Use, or rather the Abuse, of this Liquor, are affected with a Trembling of the Hands, and a Palpitation of the Heart. This, in my Opinion, is to be accounted for, not only from the too large Quantity of hot Water, which resolves and weakens the Fibres of the Stomach and whole Body, but more particularly from the stimulating Virtue of too rich Coffee, especially if the Person who uses it has a nervous System, too easily thrown into Commotions, and when it is drank upon an empty Stomach in a cold Room; for, at that Time, the cutaneous Pores being contracted, the Motion of the Humours is, by its means, more directed to the internal Parts. In Cases where the Body is not habituated to a due Degree of muscular Motion, the Coffee, precipitating in the Primæ Viæ, is converted into a kind of farinaceous Glue, which obstructs the Lacteal Vessels, and prevents the Distribution of fresh Supplies of Chyle to the Body. Hence arise all those Disorders produc'd by a preternatural Viscidity of the Blood, and a Retention of the usual Evacuations. Hence we discover the Reason, why *Waldschmidt* affirms, that Coffee, unseasonably used, without any Regard to the Constitution of the Patient, paves the Way to a Palsy. *Willis*, in his *Pharmaceutice Rationalis*, uses the following Words: "In most Disorders of the Head, such as a Cephalalgia, a Vertigo, a Lethargy, and a Catarrh, when the Habit is plethoric, the Constitution cold, the Blood aqueous, the Brain too moist, and the Motion of the Spirits too slow and languid, Coffee is often used with great Advantage; for, when daily drank, it surprisingly routes the vital and animal Spirits, and removes every thing that can retard the animal Functions. On the contrary, those who are lean, who are of a bilious or melancholic Constitution, whose Blood is acrid or retorrid, whose Brain is hot, or whose animal Spirits are stimulated to too brisk and irregular Motions, ought entirely to abstain from this Liquor, since it disorders both the Spirits and Humours, and renders them unfit for performing their several Functions; for I have frequently observ'd Patients labouring under a Penury of Spirits, Cephalalgias, Vertigos, Palpitations of the Heart, Tremors of the Joints, and Stupors, rendered worse by the Use of Coffee, and unusual Languors brought on." *Boerhaave* informs us, that many, by the continued Use of Coffee on an empty Stomach, have become indispensed and extenuated; and that he himself knew a certain Man, who, by drinking one or two small Dishes of Coffee every Morning, was seized with a Vertigo, and Dimness of Sight, which were not removed till he eat something. From that Quality of Coffee, by which it stimulates the Fibres, and exagitates the Humours, we may conclude, that it is, in a particular manner, hurtful, when strong and hot, to plethoric Patients, as also in Coughs arising from an acrid or too subtle a State of the Blood, and in confirmed Consumptions. But I take the Constitution of that Man to be singular, to whom, as *Boyle* informs us, a Dish of Coffee proved a more powerful Emetic, than Emetic-wine itself. The Observations of great and skillful Physicians evince, that the above-mentioned Disorders may be brought on by the too frequent and too liberal Use of Coffee. Thus *Hoffman*, in his Dissertation *De Remediorum benignorum Abusu*, uses the following Words: "No one, says he, will easily believe,

that Coffee is prejudicial to his Health, since not only with the Turks, but also with our own Countrymen, nothing is more common than to drink liberally of it early in the Morning, and immediately after Meals; yet we have numerous Proofs, that this Practice is often attended with bad Consequences; for a frequent and immoderate Use of this Liquor is highly prejudicial to weakly Persons, and more especially Women, whose Nerves and Strength are considerably impaired by it; and, either in Child-birth, or on the Attack of any Disease, so considerable a Languor is brought on, that their Strength is hardly able to surmount the Symptoms, with which they are afflicted. I know several Persons, who, by a too frequent Use of this Liquor, have contracted a Trembling of the Hands. Others, by its means, I have known afflicted with an obstinate Watchfulness, and a Debility of the Senses; for these *Arabian*, as well as other Species of Beans, abound with an Oil, which is not friendly and balsamic, but hurtful and injurious, to the nervous System, which it renders still more weak than it was before." *Stare*, in the Dedication to his Vindication of Sugars, informs us, that he became paralytic by too liberal an Use of Coffee; and that his Disorder was removed by his abstaining from that Liquor. *Stenzelius*, in the first Book of his *Toxicologia*, speaks of the Disorders arising from the Abuse of Coffee in the following manner: "Coffee often proves a temporary Poison, when used too frequently in too large Quantities, or promiscuously by Persons of every Constitution, especially in the Afternoon; for, by the Roasting, its saline-volatile Parts are carried off, and there are only left a narcotic Oil, and an Earth, which produce Obstructions and Costiveness. Hence we observe, that those, who have narrow Vessels, and thick and tenacious Juices, are, after the Use of this Liquor, especially when rich, afflicted with an Uneasiness of the Præcordia, a Palpitation of the Heart, Anxiety, Restlessness, Sadness, Watchings, and various other Disorders; for, by the earthy and oleous Parts of the Coffee, the Circulation of the already viscid Blood through the Apices of the small conic Vessels is more and more retarded; the thick, slimy, and terrestrial Juices stagnate here and there; and, when a Cohesion is once begun, by the Accretion and Combination of similar Particles, Obstructions and Infarctions are formed in the shaggy Extremities of the capillary Vessels, which, proving a Stop or Hindrance to the succeeding Blood, produce a Regurgitation, and the several Symptoms arising from it. On the contrary, we find, that the moderate Use of this Liquor produces no bad Effects in Persons of hot and fine Juices, but rather preserves their Health, by correcting the acrid Particles of their Fluids, corroborating the Villi of the solid Parts, and promoting the Secretion of the Excrements, Sweat, and Urine." In the Year 1695. it was in the Schools of *Paris* defended as a Thesis, that the daily Use of Coffee rendered both Men and Women unfit for Procreation; but no one will affirm this, who considers, that as numerous a Progeny is brought into the World since the daily Use of this Liquor in *Europe*, as before. With respect to this Subject, the above-mentioned *Stenzelius* speaks in the following manner: "In brisk and vigorous Persons, whose Genitals are in good Order, and who have a sufficient Quantity of gelatinous Juices, Coffee, moderately used, is so far from impairing, that it rather promotes Venery. But it produces contrary Effects in weaker Persons, who abound with Phlegm, and a Superfluity of earthy Particles, or whose genital Organs are languid. Of this Class was the King of *Persia* Sultan *Mahmud Kasim*, who, being a great Lover of Coffee, could not perform the Office of a Husband with due Vigour. The unfortunate Queen ascrib'd his Impotence to his immoderate Use of Coffee, and was so firmly persuaded of its arising from that Source, that when, from her Window, she saw a Horse led out, she asked with what Intention the People did so; and being told, that the Animal was about to be castrated, she replied, that such a harsh Method was by no means necessary, since, by the Use of that hellish Liquor Coffee, he might be enervated, and rendered like the King." I can by no means agree with those who affirm, that, by the daily Use of it, Scurvies, hypochondriac Disorders, and Melancholy, are rendered more universal than in former Times. Without determining whether Coffee contributes more or less to Health, according as Persons love it, we shall only say, that it has been, in many Cases, observed to produce very happy Effects. The Abuse of a Thing ought never to destroy its Use. It was therefore unreasonable in *Simon Paulli*, a celebrated *Danish* Physician, universally to condemn Coffee. This Author's Opinion, ill-grounded as it was, was afterwards espoused by two learned *French* Physicians, *Duncan* and *Hecquet*. Since, from what has been said, we see, that Coffee is beneficial to some, and hurtful to others, we shall here quote the Words of the celebrated *Cheyne*, in his Essay on Health and long Life, with respect to Coffee: "As to Coffee, says he, it is a mere Calx, or a kind of burnt Horsebean, but lighter on the Stomach, and of a somewhat better Flavour. The Turks use it and Opium instead of Brandy. But the

"Plea



"Plea which some make for running into Excess in it, from this *Mahometan* Custom, is altogether weak and groundless; for those who do so there, suffer for it as we do here; and those who debauch in it, turn stupid, feeble, and paralytic by it; especially when they join Opium with it, (as they frequently do) as those who wallow in these do here; and are as much despised and exposed by serious Persons, as our Topers and Brandy-swillers are here. A Dish of two of Coffee, with a little Milk to soften it, in raw or damp Weather, or on a waterish or phlegmatic Stomach, is not only innocent, but a present Relief. But 'tis as ridiculous, and perhaps more hurtful, at least in thin and dry Habits, to dabble in it two or three times every Day, as it would be for such to drink nothing but scalding Lime-water." Dr. *Andry*, in his *Treatise des Aliments de Carême*, directs a Method of preparing Coffee, which excels the ordinary Sort, is of a more grateful Taste and Smell, proves beneficial to the Head and Stomach, removes Crudities, corrects the Acrimony of the Humours, and cures obstinate Coughs. The Method of preparing it is as follows:

Take of unroasted Coffee-berries, well ex-corticated, a Dram: Boil them in eight Ounces of common Water, for half a Quarter of an Hour at most, and there will be a Liquor of a Lemon-colour produced; which, after settling a little in a close Vessel, is to be drank warm, with an Addition of Sugar.

The same Seeds may be kept for a second, or even a third Infusion, because they do not impart all their Virtues to the Water at once. If they are long boil'd over a strong Fire, the Liquor becomes greenish, which indicates an Admixture of earthy Parts, but the Coffee becomes less valuable. But Mr. *Duncan* objects against this Method, and maintains, that by it that Principle is not extracted, for the sake of which the Coffee is prepared; that the Tincture is insipid, almost without Smell, and, in Reality, little else than warm Water; for which Reason it is to be prefer'd, by such as only drink Coffee for an Amusement, since the Abuse of it is less prejudicial to Health, and less expensive. In order to save Expences, various Experiments have been made upon Seeds of the Pulse and Corn Kind, with a View to discover a proper Succedaneum to Coffee, possess'd of the same Taste and Qualities. It is, then, found, that common Beans, roasted, come very near Coffee, with respect to the Taste and Smell; but they are heavy on the Stomach, and create a Head-ach. It is also found, from Experience, that Rye roasted, with a sufficient Mixture of Almonds, for the sake of the Oil, and boil'd longer than common Coffee, affords a Liquor exactly of the same Taste, Smell, and other Qualities. *Newman* calls the Coffee prepared of Rye, *Café à la Paisane*, in Imitation of the *Café à la Sultane* of the French. D. *Friedel*, in a German Treatise intitled *Medicinsche Bedencken*, prepares, what he calls a Drink for Women, from an equal Quantity of sweet and bitter Almonds, well ex-corticated, roasted till they are black, and almost reduced to a Powder. This he recommends for weaning those, who are accus-tom'd to drink Coffee, from it; for it is not possess'd of the same Qualities. They who intend to render old and effete Coffee-berries as grateful as if they were fresh and recent, add a little Butter to them, when they are roasting. We must also observe, that roasted Coffee-berries are candied with Sugar, and presented to the Table by way of Desert; and that, by means of Spirit of Wine, there is a Liquor prepared from Coffee, which the French call *Coffee-water*, and which is made in the following manner:

Take of roasted Coffee, three Ounces; of Spirit of French Wine, two Pints: After Digestion, distil them, and edulcorate the distill'd Liquor with a sufficient Quantity of Sugar. This Preparation is intended for those who are very fond of the Smell of Coffee.

Many have affirm'd, that the Use of Coffee was first discover'd in the East by an Abbot of a Monastery, who being inform'd by a Keeper of Goats or Camels, that these Animals, upon browsing on the Leaves, or eating the Fruit, of the Coffee-shrub, kept themselves awake, and danced about all Night, recommended the Seeds of this Shrub to the Monks, that they might be the better enabled to watch, and offer up their Prayers. But this is an erroneous Opinion, arising from this, that a certain High Priest of the *Mahometan* Law, call'd the Musti, about the Middle of the fifteenth Century after Christ, having travel'd from the City *Adde*, in *Arabia Felix*, to *Persia*, there saw the Inhabitants drinking Coffee. This Musti, returning home, and falling sick, was cured by Coffee, and procured it a great Reputation; especially because he observed, that it removed heavy Pains of the Head, exhilarated the Mind, and prevented Sleep; on account of which last Circumstance, he recommended it to his Devotees, when offering their nocturnal Prayers. From *Arabia* it was introduced into *Egypt*, by

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Monks of the *Mahometan* Sect, about the Beginning of the sixteenth Century. At this Time, when he who govern'd at *Mecca* in *Arabia*, as Sultan, saw Coffee drank in the Temple, he was so enraged at the Affront, that, calling a Council, he condemn'd it by public Authority, because it excited People to do Things inconsistent with the *Mahometan* Religion. Some Physicians, in the mean time, must'r'd up Arguments against its salutary Qualities, tho' they were opposed by others. But this Edict of the Sultan was soon abrogated. After this; both in those Parts of *Arabia* and *Egypt*, which were subject to the *Turks*, some Hypocrites attempted to discountenance the Drinking of this Liquor, but to no Purpose; for the Love of it not only more effectually seiz'd the *Arabians* and *Egyptians*, but also affected the *Turks*, and, thro' *Syria*, reach'd *Constantinople*; where, about the Middle of the sixteenth Century, public Coffee-houses began to be erected for the Drinking of Coffee. But when, in this Place, the Number of Taverns was enlarged, and Men neglected the public Worship in order to attend them, some zealous Devotees had Interest enough to get Coffee condemn'd by public Authority; alledging, that it was inconsistent with the Laws of *Mahomet* to use any thing, by way of Aliment, which resembled Coals, as, said they, Coffee did; and therefore could not be drank by *Mahometans*. And tho', in the Reign of *Amurath* the Third, the Prohibition was reinforced, yet, because Men could not totally abstain from this Liquor, Liberty was granted, that they should drink it privately who paid a certain stated Sum; the Law remaining in Force only against those who drank it publicly. At last, by another Musti, the Law was totally abrogated, and a Proclamation issued out; That Coffee-berries were not to be consider'd as Coals, and, consequently, that their Use was not inconsistent with Religion: Upon this, People of all Characters drank Coffee, and Coffee-houses were publicly authoriz'd for the Sale of it. But, when *Kupruli* govern'd for *Mahomet* the Fourth, who was not as yet of Age, it was observed, that these Coffee-houses were too commodious for those who wanted to pry too curiously into the Measures of the State; for which Reason they were prohibited at *Constantinople*, except a very few. This Liquor is, however, still used in private Families, and sold in the Streets not only of *Constantinople*, but also publicly in Coffee-houses in the other Cities of the *Ottoman* Empire. So necessary this Liquor is thought among the *Turks*, that Husbands are bound, by Contract, to provide their Wives with it, as a Thing they cannot possibly do without. *Dumont* endeavours to prove, that Coffee has been used from Time immemorial in the East, or at least among the *Arabians*; but his Arguments will not bear a rigorous Scrutiny. It seems probable, that the *Venetian* Merchants, in their Return from the East, having learnt the Use of Coffee either in *Egypt*, or at *Constantinople*, made it known to the other Parts of *Europe*. In *France* it is said to have been first known at *Marseilles*, in the Year 1644. In *Paris* Coffee was scarcely known till 1669. From the Inhabitants of *Marseilles*, and especially those of *Paris*, the Use of this Liquor spread itself not only thro' the other Provinces of *France*, but also, in all Probability, thro' the other Parts of *Europe*. The first Coffee-house in *London* is said to have been erected in 1652. but at present 'tis computed, that there are three thousand of them in this City.

The first public Coffee-house in *London* is said to have been at the Tilt-yard.

*Geoffroy* informs us, that we may distinguish two Kinds of Coffee, one small and greenish, like Houn; the other large and yellowish. This latter Sort is the least valued, and grows in the Island of *Bourbon*. Coffee enlivens the Blood, cures Head-aches, sometimes promotes the Menstrues; and, therefore, they who are subject to large Hemorrhages, or an Erysipelas, ought to abstain from it; for, till then, they can never be cured. It certainly accelerates the Motion of the Blood, and has been often observed to cause Bleeding at the Nose.

If Coffee produces Hemorrhages, it must certainly promote Miscarriages.

COHOB, COHOPH, COHOBUM, COHOBATIO. Cohobation. The Returning of a Liquor, distill'd from any Substance, back again upon the same Substance, and distilling it again, either with or without an Addition of fresh Ingredients. See AQUA.

COLLA. The same as ALCOHOL. *Castellus* informs us it is used, in *Avicenna*, to express dry Collyria for the Eyes, in fine Powder.

COLIOS. The same as CHAOS.

COHYNE. An American Tree, with Leaves like the Laurel. It bears a Fruit as large as a Melon, in the Shape of an Ostrich's Egg, of which the *Indians* make Cups. This Fruit is not eatable; but the Inside of it, bruised, and applied to the Head, is said to ease Pains thereof.

COLATORIUM. A Strainer, of any Kind.

COLATURA. Any strain'd or filtered Liquor is thus call'd.

COLCAQUAHUITL. An American Plant; also call'd *Johualcochitl*, seu *Flos Orbicularis*, *Nieremberg*.



The Leaves, laid upon the Breast, are said to cure a Syncope; drank, with Water, to provoke Sweats; fry'd, the Juice being previously express'd, they make those who eat them grow fat; powder'd, and sprinkled upon obstinate Ulcers, it is said to cure them. It has also the Reputation of being good in Palsies, and Uterine Disorders. *Raii Hist. Plant.*

## COLCHICUM.

The Characters are,

The Flower is naked, monopetalous, hexapetaloid, in the Shape of a very slender Tube, which arises immediately from the Root. The Ovary, which is lodged within the lower Part of the Flower, is furnish'd with a long Tube, and becomes a triangular, oblong, tricapsular Fruit, full of round Seeds. The Root is double, tuberous, carnos, barren and wither'd in its outer Part, after one Year; while the other Part, which is inclosed within the former, runs into Fibres, is cover'd with a membranous Skin, and sends up a Plant. *Boerhaave's Index alter, Par. 2.*

*Boerhaave* mentions eight Species of this Plant.

1. Colchicum; verum; Hispanicum. *C. B. P.* 69. SPRING-FLOWERING MEADOW-SAFFRON.

2. Colchicum; candidum; multiflorum. *C. B. P.* 68. *M. H.* 2. 341. MANY-FLOWER'D WHITE MEADOW-SAFFRON.

3. Colchicum; commune. *C. B. Pin.* 67. *Raii Hist.* 2. 1170. *Synop.* 3. 373. *Hist. Oxon.* 2. 340. *Buxb.* 77. *Rupp. Flor. Jen.* 27. *Tourn. Inst.* 348. *Elem. Bot.* 388. *Boerb. Ind.* A. 2. 117. Colchicum, Offic. *J. B.* 2. 649. *Chab.* 225. *Dill. Cat. Gissl.* 175. Colchicum purpureum & Anglicum album, *Ger.* 127. *Emac.* 157. *Park. Theat.* 153. Colchicum Anglicum purpureum, ac etiam flore albo, sed rarius. *Mer. Pin.* 28. Colchicum purpureum, ac etiam flore albo sed rarius. *Merc. Bot.* 1. 29. *Phyt. Brit.* 29. MEADOW-SAFFRON. *Dale.*

It is found in fat and rich Meadows; and the Root is the Part used, which is mortal to those who eat it after the manner of Mushrooms, by suffocating them. *Diosc.*

The Root is supposed by some to be the Hermodactyl of the Shops: It is of a poisonous Quality, but is recommended in the Gout, being externally apply'd. *Buxb. Dale.*

4. Colchicum; pleno flore. *C. B. P.* 69. *J. B.* 2. 654. *Chif. H.* 202. DOUBLE-FLOWER'D MEADOW-SAFFRON.

5. Colchicum; pleno flore, variegato. *C. B. P.* 68. *M. H.* 342.

6. Colchicum; floribus Fritillariæ instar tessellatis; foliis planis. *M. H.* 2. 340.

7. Colchicum; Chionense; floribus Fritillariæ instar tessellatis; foliis undulatis. *Hist. Oxon.* 2. 341? *Hermodactylus*, Offic. *Park. Theat.* 1587. *Chab.* 228. *Mil. Cat.* 53. *Hermodactylus Officinarum*, *Ger.* *Emac.* 164. *Raii Hist.* 2. 1172. Colchicum radice ficcata albâ. *C. B. Pin.* 67. Colchicum minus malignum, sive Hermodactylus Officinarum. *J. B.* 2. 658. Colchicum variegatum. *Corn.* 173. HERMODACTYLS. *Dale.*

This is a Root which is brought to us from Turkey; but what Plant it is the Root of, we have no certain Knowledge; some taking it to be the Root of a Colchicum, or a *Dens Caninus*; others, of a tuberous *Iris*; and others, of a Species of *Cyclamen*. They are flattish on the one Side, and a little convex on the other, somewhat in the Shape of a Heart, of a firm compact Substance, yet easily powdering, of a light-brown Colour without, and white within, having but little Smell or Taste.

Hermodactyls are a strong Cathartic, purging tough, serous, and phlegmatic Humours from the Joints, and are therefore accounted good for the Gout, and rheumatic Pains in the Limbs; and are an Ingredient in the *Electuarium Caryocostinum*, and the *Pulvis Diarrhetici compositus*. *Miller's Bot. Off.*

8. Colchicum; verum; flore pleno, purpureum. *H. Eyf. Fern. 6.* 2. *F. 1. Fig.* 3. *Boerhaave's Index alter Plantarum, Vol. 2.*

COLCOTHAR. The Caput Mortuum of Vitriol. See VITRIOLUM.

COLERTIUM. A Liquor prepared of the corrosive and most pernicious Parts of Metals, by virtue of which Gold is try'd, when rub'd against the Touchstone, and which no Metal, but Gold, is capable of resisting. By this Liquor we know immediately whether Gold be mix'd with any other Substance; for this latter will instantly change its Colour from the Application of this Liquor, whereas the pure Gold remains unalter'd. *Rulandus.*

COLLES, COLIS, *καλλε*, is the same as PENIS, which see.

## COLETTA VEETLA.

The Characters are,

The Leaves are conjugated, and furnish'd with Prickles: The Flowers monopetalous, quinquesid, and large: The Fruit is bivalve, oblong, containing Seeds.

*Boerhaave* mentions one Species of this Plant.

Coletta Veetla. *H. Mal.* 9. 77? *Eryngium Zeylanicum, fabrifugum, floribus luteis.* *Herman. Herbar. Viv. Melampyro*

*cognata, Maderas patana, spinis horrida, an Coletta Veetla.* *H. Mal.* 9. 77. *Plukn. Phyt.* 119. 5? *H. Boerhaave's Index alter Plantarum, Vol. 2.*

COLIAS, *Colias, sive Colia*, *Arist.* *Lacertus maximus minor*, *Plinii.*

A Fish pretty much resembling a Macarel, but mark'd with black Spots, and oblique Lines upon the Skin. It is good to eat, but its Flesh is difficult of Digestion. They salt it.

It has a resolvent Virtue, being bruised, and apply'd. The Brine or Pickle of it, held in the Mouth, cures the Tooth-ach. *Lemery des Drogues.*

## COLICA. The Colic.

The Name of this Disease is one of those not mention'd by *Hippocrates*, and it appears, by the Manner in which *Celsus* speaks of it, to be new in his Time. "*Diocles Carystius*," says he, gave the Name of *Chordapsus* to a Disease of the "small Intestine; and call'd another Disease, which is seated "in the great Intestine, by the Name of *Ileus*; but, it seems, "most of our modern Physicians call both of these Disorders "the Colic." If we may believe *Pliny*, not only the Name, but the Disease itself was new at the Time of the Emperor *Tiberius*. "The Colic, says that Author, crept in upon us " (*irrepsit*) under the Empire of *Tiberius*. None was ever "troubled with that Distemper before that Emperor; so that "when he came to mention it in an Edict, where he spoke of "the State of his Health, it was not understood at *Rome*, the "Name of *Colic* being unknown till that Time." The Passage of *Celsus*, just cited, proves, indeed, that the Name of this Disease was pretty much a Novelty in his Time; but it does not, from hence, follow, that the Disease itself never was known before the Time he speaks of. *Celsus* himself is entirely contrary to *Pliny* in that respect; for he is positive, that *Diocles* gave that Disease the Name of *Ileus*. *Hippocrates* seems to have comprehended the *Colic* under Pains of the Belly, of which he speaks in several Places.

It is not at all probable, that the Name *Colic* is so new as *Pliny* says it is; and, when *Celsus* observes, that it is the Name which most Physicians of his Time gave to that Distemper, what he says does not imply, that this Name was given it precisely at that Time. It imports only, that the Physicians, in the Time of *Diocles* or *Hippocrates*, had another Name for this Disease; and that the Term *Colic* had not been long used. What confirms me in this Opinion is, that *Celsus* himself describes a Medicine for the Colic, which was invented by *Cassius*, and that this Physician valued himself on that Invention. *Celsus* reckons *Cassius* among the Physicians of his own Age; but so as to let us know, that *Cassius* preceded him. *Cassius*, says *Celsus*, valued himself; which Expression implies, that *Cassius* was not living at the Time when *Celsus* wrote. *Caelius Aurelianus*, treating of the same Distemper, mentions also the Remedies which *Themison* thought proper in that Case. Now *Themison* lived under the Reign of *Augustus*, and before.

There is another Author, who, I believe, is as antient as the two last-named, and speaks of the same Disease, calling it by the same Name. This is *Philo* of *Tarsus*, who, among other Virtues which he ascribes to a Medicine of his own Invention, says, it is proper for those who are troubled with Pains of the Colon. This is the Name of the Intestine which is the Seat of this Disorder, and was also the Name of the Disorder itself, as we may collect from the Passage of *Pliny* before quoted. But tho' this Name was in Use among the Physicians who lived under *Augustus*, it was not, perhaps, known among the common Sort under the following Reign. And the same Thing might possibly happen at any Time, with respect to certain Names which Physicians give to some Distempers, and which occur in their Writings; but do not, however, immediately pass into Use among those who are not of the same Profession. What *Pliny*, then, says, that none ever heard any Talk of the *Colic* in the Time of *Tiberius*, is not true, if we take his Words in an absolute Sense, when he says, that this Emperor was the first of Mankind who was afflicted with this Disorder.

*Sydenham*, speaking of the epidemical Disorders of the Years 1670, 1671. and 1672. says, that, during all the Years of this Constitution, the Blood was signally disposed to deposit hot and choleric Humours in the Intestines, whence the bilious Colic prevail'd more than usual; which Disease, tho' it should be reckon'd amongst those of the chronical Kind, and consequently foreign to my Purpose, says he, yet, as it depended on the same Disposition of the Blood at that Time, from which most of the then prevailing Epidemics arose, it should, for this Reason, be treated of here; but especially because I perceived, that the same febrile Symptoms preceded it, which usually preceded the reigning Dysentery of those Times: And sometimes also this Distemper succeeded the Dysentery, when it had continu'd a long time, and seem'd to be going off. But when it did not succeed an inveterate Dysentery, it generally arose from a Fever, which afflicted the Patient only for a few Hours, and ordinarily terminated in this Disease.

It principally attack'd young Persons of a warm and bilious Constitution, especially in the Summer-season. A violent and intolerable



intolerable Pain of the Bowels attends it, which sometimes seem to be tied together, and at others closely purs'd up, and bor'd thro', as it were, with a sharp-pointed Instrument; the Pain abates between whiles, and immediately the Fit comes on again. In the Beginning the Pain is not so certainly fix'd in one Place, as in the Progress of the Disorder; and the Vomiting is less frequent, and the Belly more easily moved by Purgatives; but, as the Pain increases, it becomes more obstinately fix'd in one Place, frequent Vomitings succeed, and the Belly is less soluble, till at length the unavoidable Violence of the Symptoms occasions a total Inversion of the peristaltic Motion of the Intestines, (unless the Patient be reliev'd sooner) and consequently an Iliac Passion, in which Distemper all Cathartics immediately become emetic, and Glysters likewise, together with the Fæces, are forc'd up the intestinal Tube, and ejected by Vomit. If the Matter thus ejected be sincere, it is sometimes green, sometimes yellow, or of some unusual Colour.

As all the Signs of this Disease clearly shew it to arise from some sharp Humour or Vapour thrown off from the Blood into the Intestines, I judge the primary curative Indication to be, first, that both the antecedent Humour in the Veins, and that contain'd in the Intestines, be evacuated; secondly, that the great Tendency of the Humours to the Parts affected be check'd, and the intolerable Pain eased by exhibiting Opiates.

In order hereto I bleed freely in the Arm, if no Blood has been taken away before, and, in three or four Hours after, administer an Opiate. The next Day I direct some lenient Purgative, and order it to be repeated a second time at a Day's Interval, and sometimes a third time, according as the Remains of the Humour seem to be more or less in Quantity. But it must be observed, that if this Disease proceeds either from a Surfeit of Fruit, or any other kind of Aliment of difficult Digestion, whence depraved and corrupt Juices are first receiv'd into the Blood, and thence separated into the Intestines; in these Cases the Stomach must first be well cleansed by drinking Posset-drink plentifully, and vomiting it up again; which being over, an Opiate must be given, and a Vein open'd the next Day; and, in other Particulars, the Process above delivered is to be followed.

But when the Violence of the Pain, and the Vomiting, whence the Intestines are in a manner inverted, do not yield to Purgatives, they must be made stronger; for it avails not to exhibit a gentle Cathartic, unless, perhaps, the Patient be easy to work upon, which should be carefully inquired into, because such a Medicine, being too weak to make its Way thro' the intestinal Tube, does more Mischief, the Vomiting and Pain being increased by its languid and ineffectual Motion. A lenitive purging Potion, made of an Infusion of Tamarinds, Sena, and Rhubarb, in which Manna and Syrup of Roses may be dissolved, is to be prefer'd to other Purges, because it disturbs and agitates the Juices less. But if this cannot be retain'd in the Stomach, either because the Patient has an Aversion to a liquid Medicine, or on account of the Vomiting, recourse must necessarily be had to Pills, amongst which I esteem the *Pilula Cochiae* most, because they operate the most certainly in this and most other Cases. But where, either thro' the Weakness of the Stomach, or the Vomiting, Pills cannot be retain'd, I first prescribe an Opiate, and in a few Hours after a Purgative, at such a proper Interval, for Instance, that the latter may not be overcome, and rendered ineffectual, but continue long enough in the Stomach to communicate its purging Quality thereto, so that it may at length operate immediately after the Virtue of the Opiate is gone off. However, if the Case will permit, 'tis best to give the Purge a considerable time after the Opiate, because it operates with Difficulty, even twelve Hours after the Exhibition of the Opiate.

But because a Purge always increases the Pain in this and most other Diseases, where Opiates are indicated, at least when the Operation is over, the Patient sometimes finding Relief whilst it works, I generally give an Opiate immediately after it has done operating, and order it to be repeated daily, Morning and Evening, on the intermediate Days, that I may more certainly ease the Pain, till Purging has been sufficiently perform'd.

When the Affair of Purging is over, I endeavour to check the violent Motion of the Humours, which is all that now remains to be done, by exhibiting an Opiate every Morning and Evening, which must sometimes be repeated more frequently; nor have I ever been able to ease very violent Pains, without administering a larger Dose than ordinary, and repeating it. For what might be sufficient to overcome another Disease, proves ineffectual in this; the Violence of the Pain destroying the Force of the Medicine. Opiates may be safely repeated whilst this Kind of Pain continues violent, but not after it ceases; for which Reason I repeat the Opiate in proportion to the Violence of the Pain, till it either goes quite off, or abates considerably; observing, however, to administer it at such convenient Intervals, that I may see what Effect is to be hoped for from the former Dose, before I proceed to give another. But, in general, unless the Pain be very severe, it will suffice to exhibit an Opiate Morning and Evening. The Opiate I commonly use is my

Laudanum, says *Sydenham*, of which I give sixteen Drops at a time, in some distil'd cordial Water; or the Dose may be augmented occasionally, in proportion to the Violence of the Pain.

This plain Method, whereby the peccant Humour is discharged by Bleeding and Purging, and then Ease procured by means of Opiates, has always succeeded better with me than any other I ever knew; whereas carminative Glysters, injected in order to expel the sharp Humours, prolong the Disease, by raising a Disturbance in the Juices. But I would have it particularly remark'd here, that tho' I have affirm'd, that Bleeding and Purging must necessarily precede this quieting Method, yet sometimes, when the Case demands it, omitting both, the Cure is to be begun with Opiates. For Instance, when, by reason of some preceding Illness, large Evacuations have been used not long before the Colic began; for frequently such as have lately recovered from some other Disease, are suddenly attack'd with this, from a Weakness of the Bowels, especially if a greater Degree of Heat be occasioned, by too free an Use of Wine, or any spirituous Liquor. Now, in this Case, I esteem it not only unnecessary, but detrimental, to raise fresh Commotions, by giving more Purges. Not to mention, that the Patient, in this Disease, has generally cleansed his Bowels sufficiently, by the frequent Use of Glysters, before applying to a Physician; so that, partly upon this Account, and partly on account of the long Continuance of the Disease, it should seem, that only Opiates ought to be exhibited.

In August 1671. I was call'd to *Belvoir-Castle* by Lord *Annesley*, who had been afflicted for some Days with a bilious Colic, attended with exquisite Pain, and frequent Vomiting. He had try'd all kinds of Glysters, and other Remedies directed by the neighbouring Physicians: I immediately advis'd the repeated Use of Opiates, in the manner above delivered; and by this means he recover'd in a few Days, and return'd to Town with me in good Health.

As this Pain is more subject to return spontaneously than any other, all Occasion of Relapse is to be prevented, by exhibiting an Opiate twice a Day for some time; but if it should return upon omitting the Opiate, as it sometimes happens, I have hitherto discover'd nothing that will so certainly promote the Cure, as taking long Journeys on Horseback, or in a Coach, observing, in the mean while, to give an Opiate every Morning and Evening; for, by this kind of Exercise, the morbid Matter is brought into the Habit of the Body, and the Blood, broken and divided by the continual Motion, as it were, undergoes a new Depuration; and, at length, the Bowels are greatly strengthen'd and refresh'd by this way of rousing the natural Heat. Nor do I think it beneath me to own, that I have frequently cur'd this Distemper by this Exercise, when all other Means had fail'd me. But this must not be attempted, unless sufficient Evacuations have been previously made; and it must be persisted in for several Days afterwards.

During these Years, one of my poor Neighbours, yet living, was seiz'd with a most violent bilious Colic, which he had long endeavour'd ineffectually to relieve by Cathartics, Glysters, and swallowing Leaden Bullets. I had recourse here to the frequent Use of Opiates; nor did they prove unsuccessful, for he remain'd tolerably easy whilst he was taking them; but, perceiving they only palliated, and did not eradicate the Disorder, for it return'd immediately after the Effect of the Opiate was gone off, I had Compassion on the Man, labouring under low Circumstances, and a violent Disease, and lent him a Horse to ride to a considerable Distance, as above directed; and, after riding a few Days, his Bowels became so strong, as to be able to expel the Remains of the Disease, and he recover'd perfectly by this means without the Assistance of Opiates.

And, to speak the Truth upon this Occasion, I have always known this kind of Exercise used with great Success, not only in this Case, but in most other Chronical Diseases, provided it was resolutely persisted in. For if we consider, that the lower Belly, wherein all the Secretory Organs are seated, is greatly agitated by this Exercise, perhaps some thousand times a Day, we shall readily believe, that they are hereby enabled to shake off any gross sly Humour fix'd there, and, which is still more material, so strengthen'd by this powerful Rousing of the natural Heat, as to be able to perform the Functions of purifying the Blood, assign'd them by Nature, in a proper manner.

In young Persons of a hot Constitution I direct a cooling and incrassating Diet, such as Cremor of Barley, Panada, and a small Chicken, or a boil'd Whiting, every third Day, if the Appetite continues craving. I allow only Small-beer, or Milk boil'd with thrice the Quantity of Water, for Drink; and I indulge nothing further, unless Riding, which is necessary to complete the Cure, requires a more nourishing Diet, and the Use of some generous Liquor, to recruit the Loss of Spirits occasion'd by Exercise.

Moreover, 'tis manifest from Observation, that when this Disease, thro' wrong Management, proves of long standing, so that the Bowels become weak, and the Patient is extremely emaciated and debilitated, the free Use of Plague-water, *Aqua Mirabilis*,



Mirabilis, or some other Cordial, which was most grateful to him when in Health, relieves at this time beyond Expectation; for, by this means, the small Remains of the natural Heat are roused, and the preternatural Ferment lodged in the Bowels, which occasions these Fits between whiles, rendered inactive.

The slender Diet above-mention'd must be continued not only thro' the Course of the Cure, but for some time after the Disease is gone off, for as it is more subject to return than any other, and, besides, is seated in the principal Instruments of Concoction, which are the Bowels, already weaken'd thereby, the least Error of this kind will immediately occasion a Relapse; and, therefore, all Aliment of difficult Digestion must be avoided, both in this and all other Disorders of the Bowels, and Food of easy Digestion used very sparingly.

Some Women are afflicted with a hysteric Disorder nearly resembling the bilious Colic in the Acuteness of the Pain, its Seat, and the yellow and green Colour of the Matter discharg'd by Vomit.

Females of a lax and gross Habit of Body are principally subject to it; as are likewise such as have formerly had some hysteric Indisposition; or (which frequently happens) those who have just recover'd of a difficult Labour, occasion'd by the Largeness of the Infant, whereby the Mother's Strength and Spirits were nearly exhausted. It attacks the Region of the Stomach, and sometimes the Part just below it, with as violent a Pain as accompanies the Colic, or that Passion, which is succeeded by exorbitant Vomitings, sometimes of green, and sometimes of yellow Matter; and with these Symptoms, as I have frequently observ'd, there is joined a greater Lowliness of Spirits, and Depression, than occur in any other Disease. The Pain goes off in a Day or two, but returns again in a few Weeks after, and rages with as much Violence as ever, before the Fit terminates. 'Tis sometimes attended with a remarkable Jaundice, which vanishes spontaneously in a few Days. When the Symptoms are all gone off, and the Patient seems pretty well recovered, the least Disturbance of Mind, whether proceeding from Anger or Grief, to both which Women are extremely liable in this Case, is subject to occasion a Relapse. Walking also, or any Exercise used too soon, will do the same; such Causes being productive of Vapours in lax and weak Constitutions. I use the Term Vapours with the Vulgar, but whether they be Vapours, or Convulsions of particular Parts, the Phenomena may be equally accounted for.

When these Vapours, or Convulsions, attack any particular Part of the Body, they produce such Symptoms as are natural to the Part affected; whence, tho' they every-where constitute the same individual Distemper, yet they artfully resemble most Diseases incident to Mankind, as plainly appears from the Disease under Consideration, which exactly counterfeits the bilious Colic, when it attacks the Parts adjacent to the Colon. And this is equally manifest also in many other Parts of the Body affected with this Disease. For Instance, it sometimes attacks one of the Kidneys with a violent Pain, occasioning excessive Vomiting; and, being frequently propagated along the Ureters, it counterfeits the Stone; in which Case the Pain being increas'd by Glysters, and other Lithontriptic Medicines, used to bring away the Stone, it continues with the same Violence for a long time, and sometimes destroys the Patient, contrary to its Nature, as being of itself not dangerous. I have also known it occasion a Train of Symptoms, exactly like those of the Stone in the Bladder. I was call'd up lately in the Night to a Countess in the Neighbourhood, who was seized, on a sudden, with a very severe Pain in the Region of the Bladder, along with a Suppression of Urine; and having learn'd, that she was subject to various hysteric Complaints, I conjur'd, that the Disorder was mistaken, and therefore forbid the injecting a Glyster, which her Maid had got in Readiness, as apprehending it might be augmented thereby; and instead of this and the Emollients brought by the Apothecary, such as the Syrup of Marshmallows and others, I administered an Opiate, which soon removed the Disorder. In reality, no Part of the Body, either external or internal, is quite free from the Attacks of this Distemper. Thus, in the Jaws, Hips, and Legs, it causes intolerable Pain; and, when it goes off, leaves such a Tenderness of the Part behind, that it cannot bear the Touch, as if the Flesh had been bruised with abundance of Stripes.

Having now, by way of Digression, delivered some Particulars belonging to the History of the hysteric Colic, to prevent its being taken for the bilious Colic, I will briefly treat of some other Particulars relating to the Cure of the Symptom of Pain attending it; for the radical Cure of the Disease itself, which is effected by removing the Cause, is a quite different Subject.

Bleeding and repeated Purgation, which are so manifestly indicated in the bilious Colic, at the Beginning, should be omitted here; for Experience shews, that the Pain, and other Symptoms, are increas'd by the Disturbance caused by these Evacuations; and I have often observed, that the Repetition of the most gentle Glysters have occasioned a continu'd Train of Symptoms: For, if we take a View of the Causes whence this Disease generally proceeds, both Reason and Experience teach, that it is

rather owing to an irregular Motion of the Spirits, than to any Depravity of the Juices. Now these Causes are either copious and preternatural Hæmorrhages, inordinate Passions of the Mind, violent Exercise of the Body, or the like; in all which, such Medicines as increase the Hurry of the Spirits are improper, and Opiates are to be exhibited in their stead, tho' the green and ill Colour of the Matter ejected by Vomit should seem to indicate the contrary; for the Consideration of Colours is of too subtle and refin'd a Nature to authorize such Evacuations as Experience proves to be detrimental; and I doubt not but this Disease, which, tho' it be very painful, does no way endanger Life, has proved fatal to abundance of Persons, thro' Mistakes of this kind. To this may be added, that, tho' a very powerful Emetic be given To-day, in order to expel the supposed Cause of the Disease, yet the Patient will the next Day vomit a Matter equally green, or of some other bad Colour, like the former.

But it must be observed, that sometimes there is such a Fullness of Blood and Juices, as resists the Operation of Opiates so powerfully, that, how often soever they be repeated, they are not sufficient to quiet the Disturbance, unless Bleeding or Purging precede. I have remarked this in Women of a very sanguine Constitution, and robust Make. This being the Case, one or more of these Remedies, and perhaps both, must be previously used, in order to make way for the Opiate, another Dose whereof will produce the Effect for which it is given; whereas, before Bleeding or Purgings, the largest avails not. But this is an uncommon Case, and these Remedies are not to be repeated. These Particulars being premised, where there is a Demand for Opiates, we are to proceed in administering them according to the Method specify'd in treating of the bilious Colic: They are to be repeated, in point of Frequency, in proportion to the Abatement of the Pain. This Method, indeed, is only adapted to relieve the present Symptom of violent Pain; for I have not undertaken to treat of that, in this Place, which removes the Cause of the Disease.

But as this Distemper, both in hypochondriac and hysteric Subjects, often terminates in a Jaundice, which increases proportionably as the original Disorder goes off, it must be remark'd, that, in curing this Species of Jaundice, all Purgatives are either wholly to be refrain'd from, or none exhibited except Rhubarb, or some other gentle Lenitive; for 'tis to be apprehended, that a new Commotion may be occasioned by Purgings, and consequently a Return of the Symptoms. In this Case, therefore, 'tis more expedient to give no Medicines at all, as the Jaundice, arising from this Cause, abates by degrees spontaneously, and totally vanishes in a short time; but if it continues long, and seems to go off slowly, we must have recourse to Medicines. I direct the following.

Take of the Roots of Madder and Turmeric, each an Ounce; the Roots, together with the Leaves of the greater Celandine, and the Tops of the lesser Centaury, each an Handful: Boil them in equal Quantities of *Rhenish* Wine and Spring-water to a Quart, to which, when strain'd off, add two Ounces of the Syrup of the Five opening Roots: Mix them together for an Apozem, of which let the Patient take half a Pint warm, every Morning and Evening, till the Cure is completed. *Sydenham.*

As there are several Species of Colic besides those taken notice of above, and other Methods of treating these, I shall add the following Treatise on this Subject.

Among other Affections incident to the nervous System may well be reckon'd those violent Pains which afflict the Intestines, as being very sensible and nervous Parts, endued with a propulsive Motion, and, by Content, affecting other Parts of the nervous Frame, in Places more remote, being productive of very pernicious Disorders.

As the small and great Intestines differ with respect to their Contexture, Capacity, Function, and Situation, so the Pains which afflict them are no less distinguish'd by the Places where they are seated, their Degree of Violence, their Danger, and other acceding Disorders.

It is observ'd, that Pains in the small Intestines are far more severe and acute, than in the great ones. This is abundantly evident from the Effects of strong Cathartics, and Poisons of a caustic Quality, in exciting most severe, griping, and racking Pains above and below the Navel, as well as in the Middle of the Belly. For this Reason *Hippocrates* calls all Pains of the Intestines by the general Name of *Iliae*, making no mention in his Writings of the Colic Pain; tho', in our Times, almost all Pains affecting the Intestines are call'd *Colic*, and so accounted.

Those Pains are more properly to be accounted *Iliae*, which affect the Middle of the Belly, either by spasmodic Constrictions, or extraordinary Inflations; whereas *Colic* Pains are seated in the Right and Left Hypochondria, and, by their Pressure and Distention, create a vast Uneasiness. *Hollerius, de Morb. intern. Cap. 39.* gives the following Description of the Pain of the Colic: "It is settled in one particular Place, like  
" a Stake



" a Stake that is fix'd, yet sometimes makes Excursions to the  
 " Groins, to the Left Kidney, or both Kidneys; sometimes  
 " takes a revolving Course upwards, shifting its Place; accord-  
 " ing to the Flexures of the Colon, which, after it has left the  
 " Rectum, is turn'd towards the Left Groin, from whence it  
 " ascends to the Left Kidney, where it is narrowest; and this  
 " Narrowness, with its Flexure at the same Place, is the  
 " Cause why the Pain is more intense in that Part. Hence  
 " the Colon, becoming more lax and enlarg'd, is extended to  
 " the Spleen, and proceeds under the Liver, where it some-  
 " times adheres to the Gall-bladder, and from thence descend-  
 " ing to the Right Ileon, ends at last in the *Intestinum Cæ-*  
 " *cum*."

We take the whole Region of the Intestines for the Seat and Subject of the Pain; yet so as that, when one Part of it is affected in an extraordinary Manner, the whole intestinal Tube, from the Fauces to the Anus, suffers by Consent; or, to speak more properly, the preternatural Motions, and even the very Inversions and Injuries of the peristaltic Motion, are communicated to all the rest, in such a manner, that, if the Cause of the Disease be very considerable, the whole nervous System is, at the same time, affected to an extraordinary Degree.

The more severe and threatening Affections and Symptoms, which either accompany or succeed the Pains of the *Intestinum Jejunum*, Ileon, Colon, or of the Rectum, in the blind Hæmorrhoids, principally arise from a Convulsion of the nervous Parts, and are as follows: A Shivering, a Trembling of the external Parts, cold Sweat, total Loss of Strength, Restlessness, Tossing, extreme Anxiety, and internal Uneasiness, Hiccups, Vomiting, Constipation of the Belly, Tenesmus, Suppression of Urine, Spasms of the Bladder, a Fever, a contracted Pulse, Difficulty of Breathing, and sometimes epileptic Convulsions, and a Delirium.

As the very Nature, or immediate Cause, of all Pain, consists in too strong a Distension, Distraction, or Expansion, of the Membranes and nervous Parts, or in too violent and convulsive a Constriction or Compression of the same, so the Pains of the Intestines proceed from the same Cause; for either some particular Parts of the Intestine are distended and distracted by retained and included Flatulences, in a violent Manner, as if they threaten'd a Solution of Continuity, or these Parts are contracted and compressed by a spasmodic Constriction, causing a very painful Sensation from some acrid, caustic, pungent Humour contain'd within the Intestines, or in their membranous Substance. For this Reason, the old Distinction, made by the Schools, of a Pain in the Intestines, or Colic, into *flatulent* and *spasmodic*, is still retain'd, not without Reason.

In a flatulent Pain of the Intestines, the Abdomen becomes turgid and inflated to a surprising Degree; and so great oftentimes is the Force of the Flatulences, as to distend the Skin in such a manner, that the Pain is exasperated by the very Touch; and there are Instances of a Hernia Umbilicalis proceeding from the Violence of these Flatulences. The Pain, in this Case, is acute; the Belly very much constipated; there is an extreme Anxiety or Oppression, attended with an Inflation of the Stomach, and a great Difficulty of Respiration, which are succeeded by Eructations, which afford some slight Relief; and, as an Accession to the Distemper, the Patient is seized with cardialgic Affections, and makes fruitless Efforts to vomit.

In the spasmodic or convulsive Colic, as it is call'd, there is a shatter Compression of the Belly, with a Retraction of the Navel inwards, an extreme Costiveness, so as not to transmit a Flatus, and hardly to admit a Clyster. There is, besides, a most severe Pain in the Loins; the Peritonæum itself, with the Muscles of the Abdomen, is violently contracted; and these Symptoms are attended with a Refrigeration of the extreme Parts, Trembling, Shivering, a hard and contracted Pulse, extreme Anxiety, and a great Disposition to fainting.

We think it proper here to observe, that there is a remarkable Difference between a Flatulence of the Intestines, and a flatulent Pain of the Intestines; for the former proceeds only from a Decay of the Tone, Motion, and Strength of the Intestines, especially in aged Persons, and those who have made an intemperate Use of cold and flatulent Food, or have their Bodies much weaken'd by some preceding Disease; but the latter never happens without severely affecting the Intestines, is not easily remov'd, and is attended with more formidable Symptoms; whereas the other soon terminates in Eructations, and a flatulent Stool or two.

We must not omit also to observe, that nephritic Pains, which proceed from the Stone in the Kidneys, are carefully to be distinguished from those, which have their Cause seated in the Intestines themselves. The confounding of these together has long since been complain'd of by *Galen*, and his Followers. How nearly soever these Disorders may agree, with respect to their Symptoms and Effects, there is this remarkable Difference between them, that the Pain, which proceeds from the Stone in the Kidneys, is more fix'd in the Loins, as well as more obstinate and acute, than in the spasmodic Colic, which, on the contrary, causes a greater Constipation of the Belly, than no-

phritic Pains. Besides, the Pain of the Colic remits after Evacuation of the Belly by a Clyster, which does not happen in nephritic Cases. In these latter also the Patient is more stimulated to an Emission of Urine, which, besides, appears very thin in the Paroxysm, aqueous, and sometimes sandy. Lastly, in nephritic Disorders, the Pain is propagated successively through the Tract of the Ureters, which is a Symptom not observed in Pains of the Intestines. But they, who have laboured under one or two Fits of the Stone, are best qualified to discern its characteristic Marks.

With respect to the Theory of Pains of the Intestines, there is one thing principally to be observ'd, which is, that the Cause, from whence they arise, has its Seat in a quite different Place from that where the Exacerbations of those Pains are felt. Thus, there never happens an Inflation of an Intestine, without a preceding or attending spastic Stricture, Straitness, or Obstruction from Excrements; or some tenacious Humour, of some Intestine in another Part or Tract. The intestinal Tube indeed is never without Flatulences, on account of the Heat and aqueous Humour constantly resident therein; but then these Flatulences create no Uneasiness; because they have free Space to expand themselves on all Sides; but as soon as a Bar is put to their Transmission, and, by being intercepted, they become collected, confined, and, in a manner, incarcerated, in one particular Place, they exert their expansive Force with great Violence upon the Membranes of the Intestines, by distending and distracting them to an extraordinary Degree.

Whenever a Convulsion, Stoppage, or extraordinary Compression, is produced in some Part of the small Intestines, as it happens in a Hernia Scrotalis, or from Worms, or harden'd Faeces; or when there is a Stagnation of a considerable Quantity of Excrement in the Beginning of the Colon on the Right-side, which cannot be remov'd, there arises a great and most painful Inflation of the Abdomen above and below the Navel, and in the Middle of the same.

If the *Intestinum Rectum*, or lower Part of the Colon, be affected with a violent Convulsion, the great Flexure of the Colon, in the Left Hypochondrium towards the Spleen, together with that Part of it, which is seated beneath the Stomach, and near the Liver, becomes inflated in a surprising Manner. But when it happens, as is frequently the Case in hypochondriac and hysteric Disorders, that the Beginning of the Jejunum, or End of the Duodenum, is spasmodically affected, there presently arises, on account of the neighbouring superior mesenteric and intercostal Branch of the Nerves extended upon the Jejunum, a most severe Pain in the Loins; the Duodenum and Stomach are filled with Flatulences to a surprising Degree, and the free Motion of the Diaphragm is obstructed; whence proceed a great Anxiety of the Præcordia, a Straitness of Respiration, with frequent, and almost endless, violent Eructations. I have, more than once, in the spasmodic Colic, observ'd the lower Part of the Colon contorted like a Rope, and the small Intestines expanded to the Thickness of a Man's Arm.

Pains of the Intestines are so frequent, that no Age, Sex, Habit of Body, or Constitution, are exempted from them; but they principally infect Infants, Women, and old Persons, and those who are of a tender and weak Nature, and of a quick and delicate Sensation.

There are different Causes of these severe and bitter Pains of the Intestines; and, according to the Nature, Disposition, and Force of those Causes, are the Symptoms diversified, and the Danger more or less to be apprehended. A very frequent Cause is a Retention and Induration of the Faeces in the large Intestines, and sometimes in the small ones, proceeding, in a great measure, from a Load of acido-viscid Crudities, dry, juiceless, and astringent Food, immoderate Sleep, and a Way of Life unused to Exercise and Motion. In this obstructed and costive State of the Belly, whenever it happens, that, upon the Use of sweet Aliments, and such as are subject to ferment, of fat Fleshments, especially Mutton, with drinking of cool Liquors, and Refrigeration of the Feet and Belly, the Inflation of the Abdomen is increased, and the Pain exasperated, we may hence discern the Nature and Marks of the *flatulent* Colic, which the Antients ascribed to a cold Cause; and whose Generation, and frequent Attacks, suppose an Imbecillity of the Intestines, and a Want of due Tone and Strength in those Parts; whence this sort of Colic is very incident to fat and phlegmatic, as well as old and infirm Persons, especially if they take not due Care to keep the Cold from their Feet, Back, and Belly.

Another kind of Colic is the *bilious*, which, according to the Antients, owes its Original to a hot Cause, and arises from a bilious, acrid, corrupted Humour, collected in too great Plenty, and stagnating in the small Intestines, especially the Duodenum. It frequently succeeds a great Fit of Anger, especially in Persons of a hot and dry Constitution, in a hot and sultry Season, in Youth or riper Years; or it proceeds from an excessive Use of hot and spirituous Liquors, and by cooling Potions, which obstruct Perspiration, is exasperated, and rages with the greater Violence. The most remarkable Symptoms, which attend it,



are, a Hoarseness of the Voice, the Heart-burn, a continual Loathing of Food, a Vomiting of porraceous bilious Matter, the Hiccups, a hot and feverish Distemperature, Restlessness, an intense Thirst, a Bitterness in the Mouth, high-colour'd Urine, and little in Quantity, which is sometimes succeeded by frequent and bilious Stools.

Infants also are subject to be molested with very severe and griping Pains of the Intestines, occasioned by a Stagnation of their Milk, which is very much corrupted, and rendered corrosive, by a Mixture of Bile. Hence the Fæces are, for the most part, green, few, and coagulated, and are sometimes succeeded by epileptic and mortal Convulsions, from a Corrosion of the Coats of the Intestines.

Children are very subject to the Colic, which proceeds from Worms collected together, and fix'd in the Intestinum Ileum. This Disorder is often attended with a continual Fever, Syncope, and a lancinating Pain of the Belly, as if it were perforated with an Auger. We find Instances of this kind in *Zacutus Lusitanus*, *Prax. admir. Lib. 2. Obs. 33.* and *Hildanus, Cent. 1. Obs. 57.*

Nor are Women in Childbed secure from very severe Pains of the Abdomen, which principally seize them on a Defect of the lochial Flux, and when the Belly is not rightly bound after the Birth, or has had its Parts refrigerated.

The Pain of the Colic, and that to a vehement Degree, is also very incident to hypochondriacal Persons; and principally seizes the Sides, seating itself either in the Right Hypochondrium, under the Os Ileum, when the Beginning of the Colon happens to be stuffed with Fæces and Flatulences; or under the Liver, the Flexure, which the Colon there makes, being distended with Flatulences and Excrements. But the Pain is most intense in the Left Hypochondrium, under the Diaphragm and Spleen, because the greatest Flexure of the Colon is there situated; and the attendant Symptoms are a Constipation of the Belly, Difficulty in making Urine, Anxiety, Oppression, internal Inquietude, and Decay of Strength; for, in what they call the *hypochondriacal Disease*, the peristaltic Motion of the Intestines being very much injur'd and vitiated, neither Fæces nor Flatulences have their due Course or Descent towards the lower Parts, but, stopping in the Intestines, especially at their Flexures, where their moving, contractile, and elastic Force is least powerful, there stagnate, and excite those troublesome and painful Distentions.

There are Pains of the Intestines, which are of a different Nature and Origin from the preceding, being caused by an impure and acrimonious Serum, seated within the Coats of the Intestines. Such a vitiated Fluid is often observ'd in scorbutic Bodies, and those who are infected with the scorbutic Purples, or the Itch; and even in the Gout, when this corrupted Matter, through a Decay of natural Strength, is retain'd, and not transmitted to the extreme Parts; or from these, on account of various external Causes, by a Metallasis translated within the Body. This Species of Colic, exerting itself principally in Convulsions, belongs to the spasmodic Kind, and is attended with very severe Symptoms. It is also difficult to be cur'd, and threatens an Inflammation, nor easily ceases to molest the Patient, till the noxious Matter be again repel'd to the Extremities. See *ARTHRITIS*.

Nor must we omit to take notice of a very bad and spasmodico-convulsive kind of Colic, by some call'd the *sanguineous Colic*, because it proceeds from Blood collected within the Coats of the Intestines, especially of the Colon, there stagnating, and very much distending the sensible nervous Membranes. Women are usually subject to this Disorder, from a Suppression of the menstrual Flux, and then it is called *hysteria*; or it may proceed from a Stoppage of the stated Flux of the Hemorrhoids, and then it is properly term'd *hemorrhoidal*; and, tho' often occurring in Practice, yet the Cause of it is, for the most part, unregarded by the Physician. Men of a good, robust, and sanguine Constitution, who are high Feeders, or indulge themselves in the free Use of Wine, and lead an idle Life, are the usual Subjects of this Distemper. Of this sanguineous Colic we have many Examples and Observations by the very learned *C. Piso*, in his excellent Treatise of *Diseases proceeding from a Collection of corrupt Serosities*.

There is a very severe kind of spasmodic Colic, which has its Origin from Fumes, which fly off in the Working of Lead, and are taken into the Mouth, and swallowed with the Spittle. This Disorder is very common among the Workmen employ'd in melting and purifying Lead, or in separating Lead from Silver in docimastic Furnaces, as it is practis'd among the Miners in the *Black Forest* in Germany, and the *Peak* in Derbyshire, and other Parts of England. The Patient is affected with an intolerable Pain of the Intestines, an extreme Costiveness, which, with Difficulty, yields to Clysters or Laxatives, a Retraction of the Navel inwards, a great Restlessness, Contraction of the Limbs, Nausea, and continual Retchings. This Disorder is very subject to terminate in a true Palsy, or a spasmodic Asthma, and often miserably torments the Patient for a long time together. Potters, who are employ'd in glazing Earthen

Ware with Lead, are obnoxious to the same Disease; and we are assured by practical Observations, that Medicines, which have Lead in their Composition, as the *Tinctura Antiphthifica*, or the Magistery of Lead, which Quacks frequently use for suppressing a Gonorrhœa, leave behind them an invincible Costiveness, attended with most tormenting Pains. The great and dangerous Inconveniences occasion'd some Years ago in *Snabia*, by edulcorating acid Wines with Litharge, was exquisitely and learnedly set forth in a Discourse made by the President *Zeller*, *De Noxa Vini Lithargyris Mangonifati*, "of the Hurtfulness of Wine adulterated with Litharge." Hence proceed not only Pains in the Stomach, Abdomen, and the Left Hypochondrium, with obstinate Costiveness, but also a convulsive Colic, and even a convulsive Asthma. This Species of Colic is call'd the *BELLON*.

There is yet another kind of Colic, which may properly be call'd *endemic*, because it is common in some Countries. Thus, the Inhabitants of *Moravia*, *Austria*, and *Hungary*, are very often afflicted with a very severe spasmodic and convulsive colic Pain, the Cause of which is nothing but an excessive Drinking of the very spirituous Wines of those Countries, especially if attended with taking Cold; for, by this means, the Blood being put in too high an Ebullition, and having its Motion increased, if it can no-way discharge itself, either by natural or artificial Evacuation, falls upon the Intestines, and, being there accumulated, excites dreadful Symptoms. But this Disorder also may properly be referred to the sanguineous and spasmodic Colic.

Some Pains of the Colic, of a very bad Kind, are consequent upon other Distempers; and I have known Instances, where a Diarrhœa, too soon suppressed by Astringents, and a Dysentery, caused by Errors in Diet, as feeding too freely on flatulent and fermentable Aliments, have been succeeded by terrible and fatal Pains of the Belly. *Fernelius, Pathol. Lib. 6. Cap. 10.* relates an Instance, which he saw, where an immoderate Use of Quinces, prescrib'd in a Diarrhœa, threw the Patient into most violent Pains and Gripes of the Belly, which increased to the Degree of vomiting up the Excrements, and proved mortal; and I have sometimes observ'd the same Effect from too violent Cathartics. They, who are well versed in the Practice of Medicine, must have taken notice, that Intermittents, as a Tertian or Quartan, not well cur'd, and especially if the Patient uses a bad Diet, have been succeeded by most dreadful and racking Pains of the Abdomen, Instances of which may be seen in *Binninger, Cent. 3. Obs. 34. Cent. 4. Obs. 41. and Lib. 4. Obs. 8, 9.* And this Disorder is usually very obstinate; for, in the Diseases which precede it, as before-mention'd, the intestinal Tube has been much deprav'd and vitiated, and its Function, which, for the most part, depends on a convenient, regular, and successive Constriction and Dilatation, disturb'd and injured to such a Degree, as easily to retain a Collection of vitious Humours; from whence these, and other destructive Diseases, may derive their Original.

To proceed, the spasmodic Colic is usually a frequent and even constant Attendant of other Pains and Disorders: Thus nothing is more common than for a Pain, proceeding from the Descent of a Stone in the Kidneys into the Ureters, and forcing its Way to the Bladder, to excite most severe Pains in the Abdomen, together with the Cardialgia, or Heart-burn, Nausea, and Vomiting; which are principally owing to the Consent of those Parts, effected by the intercostal Nerve, which is common to them. This is the Cause why some Physicians often confound the Pain of the Colic with that proceeding from the Stone, not being capable of discerning one from the other, as we before observed. It is also an Observation in Practice, that the convulsive Colic, with a strong Constipation of the Belly, which are succeeded at last by an Epilepsy, take their Rise in Infants, from the Pains which they suffer in Dentition, on account of the admirable Consent of the nervous Parts.

Moreover, it appears, among other Proofs, from Dissections, that a Pain of the Belly may be excited by a biliary Stone detain'd in the Gall-bladder, and vellicating its Duët. Thus *Ballonius, Lib. 2. Epidem. and Miscellanea Naturæ Curiosorum, An. 6, 7. Obs. 220.* inform us, that, in the Bodies of those who have died of the Colic, the Gall-bladder has been found full of Stones. And *Horslius, Lib. 4. Obs. 47.* relates, that a very severe Colic was relieved by the Discharge of two hundred thirty-three Stones from the Gall-bladder. Here I cannot omit taking notice of a peculiar Cause of Colic Pains, observed by the celebrated *Tulpius, Obs. Lib. 2. Cap. 37.* where he says, that "the Pain of the Colic is often caused by yellow Bile affecting the Colon, which is often observed in Dissections, and probably transudes insensibly thro' the Membranes of the Gall-bladder to this Intestine, as being the nearest. It is by no means adviseable, therefore, to make a strong Compression of the Liver, by bending the Body forwards, because such a Posture expresses the Bile."

Farther, it is not improbable, that Pains may be excited in the whole Volume of the Intestines, by an acrimonious Humour corroding



corroding the intestinal Membranes. And this is confirm'd by Observations on dissected Bodies, in which it has appear'd, that the purulent Matter, from the Rupture of an Abscess of the Mesentery, by its adhering to the Intestines, has excited most severe Pains and Torments before the Death of the Patients, as *Willis*, *Benivenius*, and *Wharton*, seem to hint in many Places of their Works.

Besides these Pains of the Intestines, which are of an *acute* Nature, and soon terminate in Death, or a Recovery, there are also Pains of the same Parts, which are of a *chronical* Kind, and of a longer Duration, afflicting the Patient for Weeks, and even for a whole Year together, tho' with Remissions and Exacerbations at Intervals. After Death, at length, the Cause of so tedious an Illness has been found, upon Dissection, to be a great Narrowness, Constriction, Scirrhusity, or Callosity, in some Part of an Intestine, by which the Equality of the Motion of the Intestines was quite destroy'd. To this Purpose *Kerckringius*, *Spicileg. Anatom. Obs.* 50. relates, that in a Boy, who died of the Gripes of the Intestines, he observed the Parts every-where distended with Flatulences; but the Perforation of the Pylorus so very small, as hardly to transmit a Flatus; and the Sides of the Duodenum and Rectum, subsiding, conglutinated, and, as it were, drawn together with a Thread, so as that no Flatus could make its Way through. *Hollerius, de Morb. intern. Lib. 1. Cap. 41.* and *Rhodius, Cent. 2. Obs.* 76. give us a Description of a Scirrhus of the Colon. And *Benivenius, Lib. 5. de Abdit. Cap. 30. 34.* observed the Cause of the Colic to proceed from a Callus in the Intestines. *Rhodius, Cent. 2. Obs.* 77. and 82. found a Coalition of the Intestines after a Dysentery: With this may be compared what we find in *Bartholine, Cent. 6. Obs.* 38. and 2. and *Miscellanea Naturæ Curiosorum, An. 1672.* on the same Subject. *Ballonius, Epidem. Lib. 1. p.* 58. gives an Account of an Intestine which was contracted, and cover'd with a Callus. To these we may add, that the celebrated *Waltherus*, Professor at *Leipsic*, has given us a very learned Dissertation on the Angustation, or Narrowness, of the Intestines, which is very well worth our Perusal. There has been frequently observed also, in Dissections of those who have died of the spasmodic Colic, an Implication or Folding of the Omentum; which is a plain Argument, that this Part also is subject to some sort of convulsive Motions. That chronical Pains of the Abdomen may arise from a Disorder of the Liver, we have several times observed, when that Part has been found whitish and indurated, and the Gall-bladder full of Stones: For, whenever the free Passage of the Blood through the Liver is obstructed, it is not duly depurated from bilious Sordes; and, besides, its Course thro' the Intestines is obstructed, in which, making but slow Progress, because of its Redundance, and the too great Distention of the Vessels, it makes painful Stagnations in the Membranes of the Intestines.

In those who die suddenly of an acute Pain of the Intestines, these Parts are commonly found to be inflamed and sphacelated. Thus *Spigelius*, in his Treatise of a Semiterian, informs us, that, in Dissections of Persons who died of this Fever, and had before their Death felt most violent Pains, like those of the Colic, he observed the Intestines inflamed and erysipelatous. And he adds, that it was pernicious, in these Cases, to omit Phlebotomy, and instead thereof to substitute Purgings, as the common Practice is; and we, for our Parts, have seen the Intestinum Rectum sphacelated, from an ill Treatment of the blind Hæmorrhoids.

A Fit of the Colic, or a Pain of the Intestines, is often happily resolved by a copious Sweat, an Hæmorrhage at the Nostrils, or a Flux of the Hæmorrhoids; as also by an Expulsion of purple Eruptions to the external Parts, a Fit of the Gout, or any Eruption of scorbutic Spots. There are frequent Instances, and well worthy of Observation, to be met with every-where, of severe and stubborn Pains of the Colic, occasion'd by repelling the Gout inwards, and ceasing, on a Return of the Gout to the outward and extreme Parts. Thus also a bilious Colic is resolved by a Diarrhœa, which carries off the black and putrid Matter. Remarkable to this Purpose is that noted Place in *Hippocrates's* Book of the *Humours*, at the End; where he says, that "a Person, labouring under a Pain in the Right Side of the Intestines, being taken with a Fit of the Gout, had his Pain much remitted." It is a good Prognostic also, when the Pain shifts its Seat and Place.

It is a bad Sign, when the Pain of the Colic, especially that of the spasmodic and convulsive Kind, after the Strength has been exhausted, and the Patient fallen into a colliquative Sweat, changes into a true Palsy, or into a spurious one, or into a Stupor of the Hands and Feet; and it is a fatal Prognostic, when the Violence of the Pain still increases; for, in such a Case, an Epilepsy, or Convulsions, or some other dangerous Disorder of the Head, as a Lethargy, Coma, or Apoplexy, puts an End to Life. The Colic also is very dangerous, whether it be of the convulsive or bilious Kind, which seizes the Patient with an actual Shivering, and rages with extreme Vio-

lence; for it is a Sign of an Inflammation, which, if not speedily removed, is succeeded by a Sphacelus.

#### The METHOD of CURE.

As to the Method of Cure, it appears, from what has been said, that the Causes of this Affection are surprisingly various; and consequently it may be infer'd, that the Manner of Treatment ought to be vary'd in a Way suitable to the Difference of the Causes whence a Pain of the Intestines proceeds.

When, from a Suppression of the customary Flux of the Hæmorrhoids or Menfes, especially in Bodies abounding with Blood, there arises a violent Pain of the Abdomen, attended with much Heat, and an Acceleration of the Pulse, we order a Vein to be open'd in the Foot; then prescribe emollient Clysters, antispasmodic Powders, with a small Portion of Nitre and Cinnabar, mix'd with a small Quantity of Castor; also our mineral anodyne Liqueur, (*see LIQUOR*) mix'd with Essence of Castor, and vinous Sal Ammoniac, not forgetting Bathing of the Feet, which, by remitting the Intensity of the Pain, in a surprising Manner, are sovereign Remedies in the Time of the Paroxysm. Under a Remission of the Fit we must, in order to prevent its Return, lay hold of the Opportunity, for endeavouring a Restoration of the Menfes in Women, and the Hæmorrhoids in Men, to their natural Courses. Remedies, most conducive to this Purpose, are the Use of the mineral Waters, and Bathing, especially in the Spring; besides these, Bathings of the Feet, with due Motion and Exercise of the Body, a proper Diet, balsamic Pills, and Infusions, in the manner of Tea, of carminative and uterine Herbs, are very proper.

When the Pain of the Intestines proceeds from a Redundance of intemperate and caustic Bile, the same Remedies are of Service as before prescrib'd. But what exceeds these, and all other Remedies, in this Case, is a nitrous Powder, mix'd with one or two Drops of the true distil'd Oil of *Millefolium*, (*Yarrow*) to be taken in three or four Ounces of the Water of common Chamomile-flowers; which may be render'd still more grateful, as well as efficacious, by a Mixture of Syrup of white Poppies, and sweet Spirit of Nitre, rightly prepared. And as this Water, before-mention'd, is a most convenient Vehicle for Remedies in all Pains of the Abdomen, so it operates with more Success, when distil'd with Beer made of Wheaten-malt. It is better also, in this kind of Colic, to exhibit the Remedies in a somewhat cool than hot Vehicle, and to abstain from hot Decoctions and Infusions, as well as from a sudorific Regimen, and the Use of the hot Bath, which might exasperate the bilious Humour, and cause it to penetrate more deeply into the nervous Parts. We are taught, by practical Observations, that the bare Drinking of cold Water, which *Galen* himself prescrib'd in a bilious Colic, has done excellent Service in such Cases as these, and removed the Distemper; and this Precept is the more to be regarded, if the Disorder was excited by a sudden Fit of Anger.

If the Pain be tensive, and fix'd in the Right or Left Hypochondrium, or beneath the Stomach, it is a sure Sign, that the Disorder proceeds from Flatulences, or Excrements inclosed within the Flexures of the Colon. In this Case, the principal Indication directs us to the Use of Clysters of an emollient, discutient, and corroborating Quality, not omitting external Applications of carminative and emollient Liniments to the affected Part. The Belly being thus evacuated, and the Flatulences expel'd and discuss'd, our balsamic Pills, prepared after the Example of *Becher*, are to be taken; interposing, between the Doses, some digestive Salt, Decoction of Manna, Cremor, or Terra foliata, of Tartar, mix'd with a Spoonful or two of Oil of sweet Almonds.

When the Rectum, and Part of the Colon, particularly on the Left Side, are affected with a strong convulsive Stricture, so as to be incapable of transmitting either Flatus or Fæces, and a Clyster cannot conveniently be introduced, the Abdomen is to be fomented all over with hot and rich Oils, by Coction, particularly those of Chamomile, Dill, or Rue boil'd, and with the Fats of a Badger, Dog, Fox, Beaver, or Man; which may also be introduced, if possible, into the Belly by Clysters, in order to the Relaxation of the spasmodic Constriction: This done, the Infusion of Manna, before directed, is to be exhibited.

A flatulent Colic, proceeding from Imbecillity and Want of due Tone of the Stomach and Intestines, or from crude Meats ill digested, and causing Inflations, admits of the Use of carminative Things somewhat hotter than ordinary. Among these are spirituous carminative Waters, prepared of the Seeds of Cumin and Caraway, Orange-peel, the Flowers of common and Roman Chamomile, and Cardamom, distil'd in Wine; the carminative Essence of *Wadellius*; the Essence of Orange-peel, well saturated, and exalted with the Spirit of Sal Ammoniac; the mineral anodyne Liqueur, mix'd with our liquid Balsam of Life; or the following carminative Liqueur:

Take



Take of sweet Spirit of Nitre, or of our mineral anodyne Liqueur, Essence of Orange-peel, Tincture of Tartar, each three Drams; Spirit of Sal Ammoniac, one Dram; Oil of Caraway distil'd, Oil of Cumin, Oil of Cedar, Oil of common Chamomile distil'd, of each six Drams: Mix them. The Dose is from thirty to fifty Drops.

A Draught of *Vinum Hippocraticum*, as it is call'd, prepared of Aromatics, as Orange and Lemon-peel, Mace, Cloves, Cardamoms, and Sugar, to aged Persons, and where the Disease takes its Rise from a Refrigeration of the Abdomen and external Parts, often affords extraordinary and present Relief. It is also very useful to foment the Region of the Abdomen, now-and-then, with heated Tiles, or Marble, or with Bags full of Oats and common Salt, the Seeds of Caraway and Anise, Bay-berries, and Juniper-berries, heated.

When the Pains of the Abdomen are occasion'd by the Repression, or striking inwards, of some exanthematous Matter, or critical Discharge, the Itch, Purpura, Gout, Rheumatism, or Erysipelas, a prudent Physician, who knows what he has to do, will make it his sole Care to promote a gentle Diaphoresis; in which I have sometimes very happily succeeded, by prescribing Essence of Scordium, well saturated, extracted with Spirit of Elder-flowers, not highly rectify'd, and mix'd with an equal Quantity of our anodyne Liqueur, to be taken, thirty or forty Drops, twice a Day, in some warm Fluid. About the Time of going to Bed I exhibit a bezoardic Powder, mix'd with a very small Quantity of Nitre and Cinnabar, in recent Juice of Lemons, not omitting the Use of emollient and demulcent Clysters, and keeping the Body in a gentle Diaphoresis.

If the Pain of the Intestines proceeds from Worms, as it is usual in younger Subjects, it will be proper, in order to ease the Patient, first of all, to apply a Cataplasm to the Abdomen, consisting of Emollients and Purgatives, as the Flowers of Elder, common Chamomile, Melilot, and Mullein, the Seeds of Fenugreek, Dill, and Anise, prepared with Milk and Saffron, and included in a Hog's Bladder, or in a Linen Cloth. After this, Clysters, composed of the same Ingredients, are to be frequently used, and they are to be prepared with new Milk. Internally are to be given a Tincture of Rhubarb and Tansey, which last is a true specific Anthelmintic, or Remedy against Worms; the Belly is to be evacuated, and sometimes the Use of Water, in which crude Mercury has been boil'd, is to be interposed. By these means it often happens, that Clusters of Worms, which oppress'd and obstructed the Passages of the Intestines, have been expel'd; upon which those severe Pains of the Abdomen have ceased, and all the dangerous Symptoms soon after vanish'd.

Here we must not omit to take notice of that most severe, and almost intolerable Pain, which affects the nervous Membrane of the Intestinum Rectum, a Part of most exquisite Sensation, and communicating its Disorder, by Consent, to almost all Parts of the Body. It proceeds from hemorrhoidal Blood oppressing and straitening the smaller Vessels, and is known by the Name of the *blind Hemorrhoids*, requiring a particular Method of Cure. In this Case I order a Vein to be open'd, not in the Foot, but in the Arm, for the better Derivation of the Blood from the inferior to the superior Parts. For external Use, I have had ample Experience of two Remedies of excellent Virtue: One is a Liniment, prepared of three Drams of Sperma Ceti, one Dram of Oil of Henbane, six Grains of Camphire, and ten Grains of Saffron, with which the Tumors must be anointed hot. The other Remedy is an Epithem, prepared of Water of Quick-lime, temper'd with Rose-water, and Elder-flower-water, Sugar of Lead, and camphorated Spirit of Wine, to be apply'd warm upon Linen.

As for that terrible convulsivo-spasmodical Colic, call'd *Saturnine*, (from *Saturnus*, the chymical Term for *Lead*) which afflicts the Workmen employ'd in Smelting, or otherwise Manufacturing, of Lead, and torments them to a most violent Degree, there is no better Preservative, hitherto invented, than taking some fat Broth in the Morning. For the Cure, Clysters of pure Oil, with drinking good Quantities of Oil of sweet Almonds, with or without a Decoction of Manna, are sufficient to complete the Work. To relieve the Patient, let the Patient bathe in sweet Water, and afterwards anoint the Abdomen, and Spine of the Back, with a Liniment prepared of human Fat, express'd Oil of Nutmeg, and of Henbane, Saffron, and Oil of Rosemary: There is scarcely a more certain and speedy Remedy. See BELLON.

#### CLINICAL CAUTIONS and OBSERVATIONS.

In a spasmodic and convulsive Pain of the Abdomen and Intestines, attended with a great Constipation of the Belly, by all means avoid Cathartics, and Clysters of an acrimonious Quality, which we have known to produce Inflammations, succeeded by Death.

After a long Costiveness, and Oppilation of the Intestines

with indurated Faeces, it is not sufficient to give the Patient one Clyster; for there is often Occasion for two or three to be injected within the Space of one Hour.

Sometimes it happens, that an indurated and compacted Portion of the Excrements, by fixing itself in the Intestinum Rectum, intercepts the Passage of the rest, together with the Flatulences: In this Case the Anus is to be treated with emollient Fomentations, and the Belly is to be solicited with pinguious and saline Suppositories. Some Ounces also of Linseed-oil, or Rapeseed-oil, with an emollient Decoction, in which there has been first dissolved a sufficient Quantity of *Venice Soap*, are to be injected by a Syringe, in order to mollify the Hardness of the Faeces.

The Fume of Tobacco alone, convey'd thro' a convenient Syringe, is believed to excel all other Remedies, its happy Success, in these Cases, being attested by Observations; tho', for my part, I can promise nothing, with Certainty, concerning its singular Efficacy: But thus far I know, that this Experiment, try'd on Horses, is of extraordinary Virtue in an obstinate Costiveness. I have known also some of the meaner Sort of People, who labour'd under very severe Pains of the Intestines, freed from them, in an Instant, by only swallowing the Smoak of Tobacco.

In all violent Pains of the Intestines, heating Carnatives, Sudorifics, and Bathing, are very prejudicial, when used before Evacuation of the Belly; for while they convey the bilious or corrosive Matter into the Blood, without expelling it to the exterior Parts, the Anxiety is increased, and Palseys, Contractions, hectic Fevers, and even epileptic Convulsions, are the Consequence.

Aged or weak Persons, afflicted with Pains of the Abdomen, are wholly to avoid Opiates, and much more Narcotics; and the same Caution is necessary, when the Body has been weaken'd and exhausted with long and sharp Pains; but more especially to be observed, when, after an extreme Weakness, the Patient sweats excessively; for I have known a true as well as a spurious Palsey, and even a Sphacelus of the internal Parts, produced by such Means.

However, in hypochondriacal Disorders, and the hysteric Passion, attended with a violent Cough, and severe Pains of the Abdomen, with Erosions, our balsamic Pills, or the *Pilulae Alephaginae*, quicken'd with the *Extractum Panchymagogum* of *Crollius*, with an Addition of one or two Grains of rightly prepared Laudanum, or Theriaca Coelestis, taking, between the Doses, some nitro-saline and absorbent Powders, afford extraordinary Relief under the Pains and Spasms. And thus many famous Physicians, particularly *Riverius*, *Poterius*, *Cranius*, *Hallerius*, and *Forestus*, highly recommend some cathartic Pills, mix'd with a small Quantity of Laudanum, in Pains of the Abdomen, and that not without Reason; for, on a Remission of the Pain and Spasms, the Operation of the Cathartic is much facilitated, and the intended Evacuation successfully perform'd.

If a severe Pain of the Intestines returns at certain Intervals of Time, which usually happens in *March* and *October*, especially when the North Wind blows hard, the Cause of it is probably a Collection of Blood within the Coats or Membranes of the Intestines; because, at such a Season, the Blood, regurgitating, becomes accumulated in the Veins of the Anus. For this Reason, Bleeding in the Foot will be very convenient, in order to promote the Flux of the Hemorrhoids, if customary, as a Preservative. But, if the Patient was never affected with this critical Excretion of Blood, I always found it most advisable to open a Vein in the Arm, in order to derive the Blood from the inferior to the superior Parts; whereas, if it finds no Passage by the hemorrhoidal Veins, its Impetus and Afflux towards the inferior Parts is increased by frequent Venesection in the Foot.

Hypochondriacal Persons, and those who are subject to a Flux of the Hemorrhoids, are almost continually molested with Pains of the Stomach and Intestines. If, therefore, the Disorder be inveterate, and will yield neither to domestic nor officinal Remedies, I never found a speedier or more effectual Help than a right Use of the hot *Caroline Springs*, or temperate mineral Waters, such as the *Selteran*, or those of *Embsen*, internally; and of the Waters of *Tepplitz*, externally, by bathing in them, especially if the Use of these Waters be attended with frequent and proper Motion and Exercise, and a due Care be taken of the Diet.

The same is to be understood of our *Bath Waters*.

Women in Childbed are very subject to Pains of the Loins and Intestines, especially if the Lochia flow not in due Time or Quantity. From these Pains arise exanthematous Fevers, which, if they increase upon the Patient, usually prove fatal. In this Case the Duty of the Physician is to use his utmost Endeavours for the Mitigation of those Pains, which is best effected by promoting the Lochial Flux; and, if Medicines prove ineffectual for this Purpose, Bleeding in the Foot may very safely be used; upon which the Lochia oftentimes immediately appear, and



and the Pains entirely cease, as I have found by frequent Experience.

*The PRESERVATIVE CURE.*

Those who are molested with Pains of the Intestines and lower Belly, that frequently return upon them, which is the Case, as I have often observed, of those who are afflicted with the Gout, or Stone in the Kidneys, and also of hypochondriacal Persons, and such as are subject to the Hemorrhoids, ought, before all Things, to be injoin'd a strict Regimen of Diet, and Way of Living. The principal Rules to be observed for this Purpose are, first, to avoid, as much as possible, all pernicious Perturbations of Mind, such as Terror, Anger, and Sorrow; for there is nothing so injurious to the nervous System, and so likely to excite on a sudden any latent Disease in those Parts, as a violent Commotion of the Mind. Then, in the next Place, the Cold of the North Wind is by all means to be avoided, because it has great Influence in promoting the Returns and Exacerbations of nervous Distempers; in particular, the Region of the Loins, the Parts about the Præcordia, and the Feet, are carefully to be defended against it. Again, as to Diet, such Persons are advised to abstain from leguminous Aliments, and, among these, especially from Peas, Beans, and Cabbage. Eating of fat Mutton, and especially drinking cold Liquors upon it, are to be avoided also as prejudicial. Moreover, the Body is not to remain one Day in Idleness and Rest, but to be frequently exercised. *Trallian* speaks well, and very much to the Purpose, when he recommends Motion for those Disorders, in the following Expressions: "All kinds of Motion and Exercise are admirably beneficial to those who have been subject to such a Disorder, and have frequent Fits of the same, whether it be Walking, Riding on Horseback, or Moving in a Ship or Boat; also Exercises and Frictions of the whole Body, Change of Place, and long Journeys; for all these Means attenuate, discuss, and render the whole Body free from excrementitious Incumbrances, corroborating the universal Habit to such a Degree, that the affected Parts shall not for the future collect the cold Humour, nor yet readily receive it by Influx from other Parts." In the last place, I would advise all Persons to be sparing in their Use of spirituous Liquors, and particularly of the Stomach Cordialwaters, because I have often observed, that an excessive Drinking of these Liquors has been more prejudicial and pernicious, in these Cases, than eating of Fruits; for it is a vulgar and erroneous Notion, that these spirituous Draughts contribute any thing towards the better Dissolution and Digestion of the Food, which principally depend on the salival Humour; spirituous Liquors being so far from promoting the Solution of the Aliment, that, by precipitating the chylous Parts into the Intestines, and by their incrassating and obstructing Qualities, they administer Matter for Eruptions and Flatulences. *Hoffman, Medic. Rat. Systemat.*

As I apprehend, that much the greatest Number of Colics which occur are real Inflammations, I shall make some farther Remarks upon this Distemper, when I treat on Inflammations of the Intestines. See *INTESTINA*.

*COLIFORME OS.* The *Os Cribrosum*. See *CAPUT*.

*COLINIL*, H. M. *Polygala Indica minor, siliquis recurvis*, D. Syen. Nil, *sive Indiga spuria*. The Name of an American Plant; the Juice of which, with a little Honey, is said to be a very effectual Topic for Pustules of the Mouth. *Raii Hist. Plant.*

*COLIPHIUS Panis*. A sort of Bread, which was used for Dinner, without any other Food. It was made of fine Wheat-flour, with an Addition of Barm, baked but moderately, and made into Loaves of an oblong Form. *Castellus* from *Langius*.

*COLLA*, κόλλα. Glue.

*COLLATENNA*. A certain Specific for the Cure of Wounds, mention'd by *Paracelsus* in his Treatise *de Vita Longa*, L. 2. C. 14.

*COLIATITIUM*. A sort of Food, prepared, according to *Blancard*, of the Flesh of a Capon or Pullet bruised, and then mix'd with Mutton-broth, and exhibited with Verjuice or Lemon-juice.

*COLLÉTICA*, κολλητικά φάρμακα, from κόλλα, Glue. Conglutinating Medicines.

*COLLICIÆ*. The Union of the Ducts, which convey the Humours of the Eyes from the Puncta Lachrymalia to the Cavity of the Nose.

*COLLICULA*. The same as *ΝΥΜΦÆ*, which see.

*COLLIGAMEN*. A Ligament.

*COLLIQUAMENTUM*. An extremely transparent Fluid in an Egg, observable after two or three Days Incubation, containing the first Rudiments of the Chick. It is included in its own proper Membranes, distinct from the Albumen. *Harvey* also calls it the *Oculus*.

*COLLIQUATIO*, Colliquation; apply'd to the Blood, when it loses its Crasis, or balsamic Texture; to the solid Parts, Vol. II.

when they waste away; and to animal, vegetable, and mineral Substances, which are capable of being melted; and is then the same as Fusion.

*COLLISIO*. See *CONTUSIO*.

*COLLIX*, κόλλιξ, or κόλιξ. A sort of round Loaf of Bread, or perhaps rather a Cake, made in a round and flat Form. But, in *Hippocrates*, and the other Greek medicinal Writers, κόλλιξ imports a sort of Pastil, or Troche, of the Form above-mention'd.

*COLLODES*, κολλώδης. Glutinous. From κόλλα, Glue.

*COLLODIUM*. A Word mention'd by *Paracelsus* in his Treatise *de Vita Longa*, L. 2. C. 9. in treating of the Cure of Wounds; but he no-where explains what it is.

*COLLUM*. See *CERVIX*.

*COLLUTORIUM Oris*. A Gargarism. See *GARGARISMUS*.

*COLLYMUS Lapis*, or *Collinus*. The *LAPIS AETITES*.

*COLLYRION*. The Name of a Bird thus distinguish'd.

*Merula*, Offic. Aldrov. Ornith. 604. Gesn. de Avib. 542. Jóns. de Avib. 73. Charlt. Exer. 90. Mer. Pin. 177. *Merula nigra*, Schw. A. 300. Bellon. des Oyse, 320. *Merula vulgaris*, Will. Ornith. 140. Raii Ornith. 190. Ejsd. Synop. A. 65. *Collyrion*, Turn. THE BLACK-BIRD.

*Pliny* informs us, that this Bird roasted, with Myrtle-berries inclosed in it, cures the Dysentery. The Dung, mix'd with Vinegar, takes off Freckles. *Dale* from *Johnson*.

*COLLYRIUM*, κολλύριον, or κολλύριον, from κόλλα, Glue, and οὐρᾶ, a Tail, because the ancient Collyria were in the Form of a Rat's Tail, and prepared of Powders made up with something glutinous.

The Word *Collyrium* principally and properly imported a Composition under a certain Form. *Oribasius*, *Collect. Lib. 10. Cap. 23*. says, that "a Collyrium must be four Fingers long, and of a Figure representing the Tail of a Rat;" that is, not only round and long, like the *Magdalides* for Plaisters, (see *Scribonius Largus*, *Cap. 69*.) but diminish'd by little and little towards one End, as *Celsus*, *Lib. 5. Cap. 28*. explains it, and as the Etymology of the Word imports. The Materials of a Collyrium were, in general, every thing which could serve to make up a Composition, or Mass of Medicine, of a Consistence capable of being reduced into the Form before-mention'd. This Form, being essential to the Collyrium, render'd that Name common to Medicines whose Ingredients and Uses were very different: Hence they gave this Name to Suppositories, which were a Medicine composed of Soap, boil'd Honey, and other Ingredients, and reduced into the Form we speak of, for its more commodious Introduction into the Anus. They call'd by this Name also Tents, which were made out of the Compositions for Plaisters, and introduced into Fistulas, or deep Ulcers; and used the same Term for all other sorts of Tents, which are in Use among Surgeons, not only for Wounds and Ulcers, but to put in the natural Cavities, as the Ears, Nostrils, and Penis. For the same Reason they gave the Name *Collyrium* to Pessaries adapted to the Uterus, because their Figure, as well as that of Tents, had a very near Resemblance to what a Collyrium ought to have. These Sorts of Collyria are commonly call'd *entire* or *form'd* Collyria, because they are used entire, or in the same Form in which they were made, to distinguish them from another sort of Collyria, which were reduced into a Powder, or diluted with some Liquor, when they were to be used.

It was not necessary, that these last Collyria should always be exactly in the same Form as the others; it was sufficient for them to come pretty near it, and they might be the *Magdalides* of Plaisters, which were also sometimes call'd *Collyria*; and the same Name was given to small Bits of Paste, with which they cram'd Birds, in order to fatten them. The Medicines, which went by this Name, were made up into a Mass, the better to preserve the Virtues of the Ingredients, that they might not evaporate, when not fix'd by Gums, or any other Things proper to reduce them to one solid Mass. When they had Occasion to use them, they pounded them in a Mortar, or levigated them on a Marble, to render the Powder the finer: These last Collyria were principally design'd for Diseases of the Eyes. *Oribasius*, *Collect. Lib. 10. Cap. 23*. distinguishes these two sorts of Collyria in the following Passage, which is taken from *Antyllus*: "What we properly call *Collyria* are Medicines apply'd to the Eyes, after Levigation: But the *Collyria*, commonly call'd *entire*, are used in the same entire State, and either apply'd to one Part, or introduced into another. They are apply'd to the Uterus, and introduced into Fistulas, and sinuous Ulcers." When *Oribasius* here says, that Collyria, properly so call'd, were Medicines for the Eyes, he intends, I think, only to hint, that this sort of Collyria was the most known; tho' they would not probably have had that Name, but on account of their being made, at the Beginning, in the same Form with those which were used entire. But, as this Form was not essential to this Medicine for the Eyes, they afterwards



afterwards changed it, but retain'd the first Name; whence all Remedies, proper for the Eyes, came to be call'd *Collyria*: One Sort, which was compos'd of dry Ingredients, had the Name of ξηροκολλύρια, "dry Collyria;" the other, being prepared of liquid Substances, they call'd υγροκολλύρια, "humid Collyria." The Ingredients of the first, which were the same as those that enter'd the Composition of the entire *Collyria*, were metallic Powders, Cerufs, Pompholyx, burnt Antimony, Verdegrise, Chalcitis, Cadmia, and others of a like Nature; with these were mix'd Powders made of Plants, some Juices of Herbs, and some Gums, as Saffron, Roses, Juices of Celandine and Fennel, Aloes, Myrrh, and Opium. All these Ingredients were mix'd together, and form'd into Masses, which they dry'd, and, when they had Occasion to use them, pulverized. The liquid Collyria were prepared only of liquid Substances; for Example, of *Attic* Honey, which was accounted the best, Opobalsamum, Gall of a Viper, of a Partridge, or some other Animal, and Juice of Fennel. Of these they made a Mixture, some Drops of which they instil'd into the Eyes, in case of a weak Sight, or the Beginning of a Cataract. There are various other Prescriptions for Collyria, both dry and liquid, in *Actius*, *Galen*, and other Writers. There were Collyria of both Sorts for all other Diseases of the Eyes, as for restraining a Defluxion, removing an Inflammation, easing Pains, cleansing and consolidating Ulcers of the Membranes, dissipating Specks or Pearls, and, in a Word, for all Diseases incident to the Eyes. A learned Man, who has very well explain'd and commented upon *Horace*, in his Note upon a Verse of that Poet, *Serm. Lib. 1. Sat. 5.* where he speaks of Collyria, says, that a *Collyrium* is a Medicine prepared of distil'd Waters, and divers other Drugs, for the Eyes. He was not aware, that there was no such Thing as distil'd Waters in those Times, and that the Collyrium of *Horace* was not like those which are made now-a-days.

At present, *Collyria* commonly signify topical Medicines for the Eyes; whether they are solid and dry, ξηροκολλύρια, call'd, by the *Arabians*, *Sief*, which are kept in the Form of Troches, and sprinkled into the Eye in the Form of a very subtle Powder; or whether they are liquid or humid, υγροκολλύρια, (call'd *Collyria* properly, and by way of Eminence, and often containing something of a Powder) which are either instil'd into the Eye, or apply'd by means of a Linen Cloth moisten'd therewith; or, lastly, whether they are apply'd to the Eyes in the Form of a Liniment, Ointment, or Cataplasm, or even by way of Fumes or Vapours.

Their Use is understood from the different Preparations, Materials, and a thorough Insight into the Cause of the Affection, against which the Collyrium is provided; for, as *Gorræus* justly observes, since the Eye is subject to a Variety of Disorders, there is a suitable Diversity of Collyria; some are adapted to the Beginning of an Ophthalmy, others to the State of that Disease, and others to its Decline, in the same manner as it happens in Inflammations of other Parts. In general, it ought to be observed, that great Caution is to be used in the Mixture of oily and pinguious Substances in Collyria, because, by relaxing the Vessels, they usually dispose them to Defluxions; and it is no less worthy of Observation, that acrid and astringent Matters are prejudicial to the Cornea Tunica, by too much drying it, and by that means inducing a Rigidity of that Membrane; or, by their stimulating Property, irritating the Defluxion, and by such means exciting or increasing an Inflammation. "Generally speaking, Collyria are either too acrimonious, such as those prepared of Water of Quick-lime, Sal Ammoniac, with white or *Cyprian* Vitriol; or too astringent, such as those compos'd of Alum, Dragon's-blood, *Armenian* Bole, Lapis Calaminaris, Tutty, and the White of an Egg; or too refrigerating, of which Kind are those compos'd of the Water of Frogs-spawn, Rose-water, Plantain-water, with an Addition of Saccharum Saturni; or too drying, of which Nature are those prepared of burnt Hartshorn, Lapis Calaminaris, and Tutty; or, lastly, too much relaxing; such are those compos'd of Mucilage of the Seeds of Fleabane, Quinces, Fenugreek, with Tragacanth, and fresh Butter. All these Compositions, tho' of excellent Service in other Affections of the Eye, yet, in an Inflammation, especially of the sanguineous Kind, are so far from being of any Benefit, that they are rather prejudicial; for, by their means, not only the Disease is exasperated, and takes deeper Root, but the pellucid Humours of the Eye become turbid, which is succeeded by a Tabes, Corrugation, Cataract, with a chronic, red, dry, and rough Epiphora, and an Exulceration of the Eyelids." Thus far *Frederic Hoffman*, in his *Medicina Rationalis*, T. 4. P. 1. Among acrimonious Substances, which may not safely be used, *Hedellius*, in his *Amoenitates Materiae Medicæ*, reckons Opium in the Composition of Collyria. "In Pains of the Eyes, says he, Opites, externally apply'd, are of little Service, because an ardent Heat is rather excited than mitigated by their bitter Quality; and if any one should object, that the Eyes de-light in Things endued with somewhat of Acrimony, that,

"indeed, is true; but it is better, in such a Case, to chuse Aloes than Opium, which consists of an obtunding Mucilage." We learn from *Dioscorides*, Lib. 4. Cap. 60. that the Use of Opium, in Collyria, was condemn'd by some among the Antients; and *Zecchi*, in his *Consultationes Medicinales*, lays it down as a Rule perpetually to be observed, that, when there is Occasion for a pretty strong Collyrium, the Eyes are first to be wash'd with new Woman's Milk, or Mulsum very much diluted; and this is to be done not by means of a Sponge, but by gently distilling the Liquor into the Eyes, out of a Bottle with a very narrow Neck. But that there are Cases, in which acrid Substances are applied to the affected Eye, without any other Thing, we learn from the *Eph. Nat. Curios. Decad. 3. a. 9. o. 182.* where we have an Instance of a Man, above sixty Years of Age, cured of a membranous Excrescence in his Right Eye, as large as a Pea, and of a cylindrical Form, attended with a preternatural Weakness of Sight, by gradually anointing it with a Drop or two of the Spirit of Vitriol. Various Substances are, by different Authors, recommended as proper Materials for Collyria. *Ramazzini* informs us, that the Antients recommended the Squama *Æris* for this Purpose: And *Le Mort* asserts, that, in all Disorders of the Eyes, that Species of Collyrium is proper, which consists of half a Dram of Verdegrise; Camphire, one Scruple; well rectified Spirit of Wine, about half a Dram; and of the Spirit of Sal Ammoniac, two Drams. The Tincture extracted from these, when mix'd, is of a deep Sky-colour, and must be kept for Use in a close-stopt Vessel. Such a Quantity of it is only to be used, as will give a bluish Colour to some proper Water, such as that of Roses, Plantain, Eye-bright, or Fennel. But the Collyrium will be still more valuable, if a bluish Colour is communicated to the following Mixture by an Affusion of the Tincture.

Take the White of a new-laid Egg: Let it be thoroughly incorporated with the Waters of Fennel, Eye-bright, and Roses, of each two Ounces. When it is sufficiently dissolved in these Waters, add ten Grains of the Sugar of Lead, and six Grains of white Vitriol.

The same Author, in all Inflammations, Specks, and other Disorders of the Eyes, calls that an excellent Collyrium, which is compos'd of one Dram of the Flos *Æris*, or crystalliz'd Verdegrise; Spirit of Sal Ammoniac, one Ounce; and camphorated Alcohol of Wine, an Ounce and an half: When from these a bluish Tincture is extracted, a few Drops of it are mix'd with an Ounce of some proper Water, till it is tinged with a bluish Colour, and then three Grains of the Sugar of Lead are to be added. But, for Inflammations of the Eyes, he asserts, that no Collyrium is more efficacious than the following:

Take of the Oleum Saturni, twenty Drops; of the Tincture of Copper, ten Drops; of camphorated Spirit of Wine, fifteen Drops; of the Waters of Roses, and Plantain, or Elder, each an Ounce and an half: Mix all together, and let the Part affected be frequently anointed with the Mixture.

There are numberless Forms of Collyriums to be met with, not only in the Works of the Antients, such as *Galen*, *Paulus Aegineta*, *Actius*, and *Oribasius*, but also among the Moderns; in the *Collectanea Leydens.* for Instance, in the *Pharmacina Acrzamatice* of *Wedelius*, in the *Consult. Zecchii*, in the *Observat. Medicin.* of *Forestus*, in the Works of *Ettmuller*, and in the *Ephemer. Nat. Curios.* There are also various Forms of this Medicine in the Shops, which have either their Denomination from their Colour, or their Inventor; such as the *Collyrium album*, in the *Antidotarium Bononiense*, which is also call'd *Sief album*, or the *Trochisci albi Rhafis*; the *Collyrium*, or *Sief album Galeni*, which, in the *Antidotarium Florentinum*, is call'd *Trypherum Galeni*; the *Sief album Mesuae*, in *Antidot. Florentin.* the *Collyrium D. Bruni*, in *Lemery's Pharmac.* which, in *Schrader's Pharmac.* is call'd *Aqua Ophthalmica Bruni*; the *Collyrium Citrinum Mesuae*, in the *Antidotar. Bonon.* the *Collyrium Damantii*, in *Lemery's Pharmacop.* the *Collyrium Lanfranci*, in the *Phar. Parisien.* the *Collyrium Libianum*, in the *Antidot. Florentin.* the *Collyrium rubrum aridum Rhafis*, in *Antidot. Bonon.* the *Sief rubrum Mesuae*, in *Antidot. Florentin.* the *Collyrium*, or *Sief Viride Antwi*, in the *Pharmacop. Augustan.* and several others in various *Dispensatories*.

COLOBOMATA, κολοβοματια. The Meaning of this Word is, in *Celsus*, express'd by *Curta*. Both these import Deficiencies in some Part of the Body, particularly in the Ears, Lips, or Ale of the Nostrils.

COLOCASIA.

The Characters are,

The Root is tuberous, thick, and satineous; the Leaves are smooth, and have their Peduncle inserted into their Umbilicus. From the End of the Peduncle proceeds a monophyllous, membranous Calyx, of an oval Figure, hollow beneath, and expanding itself above into an acute or sharp-pointed Vagina, h-h



half open like a Sheep's Ear. From the Bottom of the Calyx arises an Axis, surrounded with many spherical berry-like Ova, each furnished with a long slender Tube, like a Filament, and bearing one or two roundish Seeds. Round the same Axis, above the Ova, grow the masculine Stamina, in very close Order, and furnish'd with their proper Testiculi. Above these again, round the same Axis, stands a third Series of numerous Filaments. The Axis here runs out into a slender purple Peduncle, which at last ends in a long black Clava.

*Boerhaave* mentions five Species of this Plant, which are,

1. *Colocasia*. See *Arum maximum*, *Ægyptiacum*, quod vulgo *Colocasia*.

2. *Colocasia*; maxima; foliis à parte posteriore usque ad pedunculi insertionem apertis. *H.*

3. *Colocasia*; strongylorhiza; Zeylanica; pediculis & limbis foliorum atropuniceis. *Par. Bat. 85. Arum maximum, Ægyptiacum, quod vulgo Colocasia, cauliculis nigricantibus Zeylanica. H. L. H.*

4. *Colocasia*; quod *Arum Zeylanicum*; minus; *Colocasiæ foliis*; pediculis puniceis. *Par. Bat. 77. Par. Bat. Pr. Ghabala Zeyl. Arum Ceylonicum, cauliculis nigricantibus, foliis Colocasiæ similibus. Commel. Cat. Hort. Med. Amst. H.*

5. *Colocasia*; Americana; folio ex viridi & rubro speciosissime variegato. *Boerhaave's Index alter Plantarum, Vol. 2.*

COLOCHIERNI. A Name for a Plant call'd *Colochierni Carduus Cretensis*. *J. B. Atractylidi et Onico sylvestri similis. C. B.*

It differs very little from the *ATRACYLIS*.

COLOCYNTHIS, *κολοκύνθις*. *Colocynth*, commonly call'd *Coloquintida*, or the bitter Apple. *Hippocrates* mentions this under the Name of *κολοκύνθη ἀγρία*, wild Cucumber. This he sometimes directs as an Ingredient in stimulating Pessaries. But I do not remember, that he any-where recommends it as an internal Medicine.

The Characters of the *Colocynthis* are,

It is in every respect like the Gourd, except that the Leaves are deeply jagged; the Fruit is extremely bitter, and not eatable.

There are two Sorts of *Colocynth* mentioned in Medicine. The first is, the

*Colocynthis*, *Offic.* *Ger. 768. Emac. 915. J. B. 2. 232. Chab. 133. Raii Hist. 1. 642. Colocynthis vulgaris, Park. Theat. 160. Colocynthis fructu rotundo minor, C. B. Pin. 313. Tourn. Inst. 108. Chomel. 67. COLOQUINTIDA. Dale.*

The bitter Gourd, in its Manner of growing, and Make of the Leaves, pretty much resembles the Water-melon; it has such hairy creeping Branches, with Claspers, by which it climbs upon any thing, like other Gourds. The Leaves are divided into five Laciniae, or Sections, but somewhat broader than the Water-melon-leaves; the Flowers come forth at the Joints with the Leaves, and are alike in Shape, but of a yellowish-white Colour. The Fruit is of the Bigness, Shape, and Colour of an Orange, but smoother, with a hard Shell, or Bark, including a white spongy Pulp, full of flatish, oval, hard Seed, of a pale-yellow Colour: This Fruit is exceedingly bitter. It grows in *Turkey*, whence it is brought to us with the outside Orange-colour'd Bark taken off. *Miller's Bot. Off.*

This has been a Drug of great Esteem in Medicine for many Ages. Its Roughness and Violence of Operation has always tortured the several Hands it has passed thro', to determine in what Part of its Composition this Quality resided, that they might the better know how to correct and mitigate it. To some it seems to reside in certain resinous Particles, which soonest join with a spirituous Menstruum, and therefore make such Infusions too violent; for which Reason they direct more aqueous Dissolvents, and such as are capable of uniting with Salt of Tartar, which would separate the Resins, and make their Efficacies upon the Fibres more moderate. *Schroder* and *Ludovicus* speak much of this Management, and commend the Extract made by Evaporation of the Liquor with Salt of Tartar for its Corrector: They direct it from three to eight Grains. Others conjecture its cathartic Property to be more in its slimy and mucilaginous Parts, which are best drawn out and dissolv'd by plain Water: But most assign it to a penetrating volatile Salt; and this latter seems to have been the Opinion of the Antients, particularly of the *Arabians*: For which Reason, in the *Trochisci Albandal* (for *Handalu*, or *Albandala*, was the Name by which this Drug was known to them) it stands corrected with gummy and mucilaginous Bodies, as they are most proper to blunt the Violence of those Spicules, and prevent their too great Irritation of the Membranes. *Pan Helmont* speaks of this as a thing which might easily be divested of its purgative Quality, and reduced into an extraordinary Alterative in some Chronical Cases; but this is a Secret not yet found out.

In the Memoirs of the *French Academy* for 1701. *Monsieur Boulduc* has given his Observations and Experiments on this Drug, which are worth our Notice. He tells us, that it is the Fruit of a Plant of the Nature of a wild Gourd, and is very purgative, inasmuch that its Operation is sometimes attended with Excoriations of the Membranes, and a Discharge of

Blood: Whence many have conjectur'd, that *Coloquintida*, by its volatile Salts, would render the Blood more fluid; but our Author did not find this true by his own Experience; for he put a good Quantity of it in Powder to new-drawn Blood, which did not prevent it from running into its usual Coagulations. The little Success of the Means hitherto attempted to correct this Remedy has not hindered *Monsieur Boulduc* from trying others. He fermented four Ounces of its Pulp with six Pounds of good Must of Wine, for ten or twelve Days together; then he distill'd this Mixture in a Vapour-heat by Degrees. The first Portion of eight Ounces was very clear, moderately spirituous, and excessively bitter. The other Portions gradually decreas'd in their Qualities; and, when the Liquor came altogether insipid, he put an End to the Distillation, and evaporated the Remainder into an Extract, which was of a sufficiently solid Consistence, and weigh'd two Ounces and a half.

With these, Experiments were made upon the Sick with all necessary Precaution. An Ounce of what came away first in the Distillation caus'd great Nauseas, and severe Colics, which were obliged to be appeas'd by other Remedies; tho' two Ounces of the same, upon another Trial, had its Effect, but with Gripings. Of the Extract made after Distillation, he gave ten Grains, which operated without Violence or Irritation; which he attributed to the essential Salts of the Wine, whose Acids had suppress'd, and, as it were, fix'd the volatile Salt of the *Coloquintida*.

Next, instead of Must, *Monsieur Boulduc* made use of Water, and put in Digestion for fifteen Days sixteen Ounces of the Pulp, with two Quarts of Water; after which he distill'd the Whole. The Liquors, which came away, had nothing in them penetrating or volatile, had no Taste, and, if taken inwardly, had no Effect; but the Extract made of what remain'd after Distillation he found to be very efficacious. It was a gentle Purger, and of sufficient Force, given in but little Quantity. Perhaps, says he, as the Substance of the *Coloquintida* is extremely spongy; its mucilaginous Parts, which are in great Number, are the most offensive; and a long Digestion, in a large Quantity of Water, may so attenuate, subtilize, and dissolve them, that an Extract made in this manner may be a good Preparation; and he believes the following Experiments confirm this Opinion. He drew from the *Coloquintida* all the Tinctures possible with Water, and by Filtration separated the clear from the mucilaginous: Of each of these he made a solid Extract, of which the former was the more efficacious, tho' a more gentle Purger than the latter. The last Trial he made was with Spirit of Wine: From eight Ounces was obtain'd but half an Ounce of a resinous Extract; whereas he had from the same Weight, by the means of Water, near three Ounces of a saline one, reckoning both its clear and mucilaginous Parts: Whence he concludes, that the *Colocynth* contains much more Salt than Oil or Sulphur; and that it is probable the Salts, particularly the more gross, envelop'd in the mucilaginous Parts, are the Occasion of its violent Operation.

I shall leave the Reader to make the best Application of this Account, to his own Practice, he can, and only observe, that the common way of making the *Enslachian Extract*, that is, *Extractum Rudii*, contradicts *Monsieur Boulduc's* first Experiment, of the Spirit's coming over excessively bitter and purgative; for the Liquor, in which the Ingredients of this Composition, the principal being *Colocynth*, are infused, when it is drawn off by Distillation, (which most do only for good Husbandry, as it may serve for the same Use again) has neither Colour, Taste, or purgative Quality, any more than common Spirit of Wine: So that *Monsieur Boulduc* seems to have made a Mistake in the Experiment, by letting some small Quantity of the Infusion inadvertently pass over into the Receiver, which, in the least Portion, would give an extreme Bitterness to the Whole that came over by Vapour.

This Drug is yet much in the Official Compositions, but hardly ever met with in extemporaneous Prescription; its nauseous Taste not making it tolerable in any Form but Pills, where it can be covered. It is so smart a Purger, as not to be safe but to athletic Constitutions, and such full Habits, where the Fibres are sufficiently guarded by a large Quantity of Humours, from its vehement Vellications. It is by all esteem'd very efficacious against Worms; but its Roughness of Operation makes it hardly safe to give to Children, who principally want it upon that Account, unless in Glysters. The *Confectio Hamech*, which our College retain in their Dispensatory, is never prescrib'd, because it is so irksome in taking, from the Taste it has of this Ingredient. *Quincy's Dispensatory.*

*Geoffroy* adds, that the Pulp of this Apple is bitter and purgative; but the Seeds have neither of these Qualities in so great a Degree, except they have touch'd the Pulp; for then they become very bitter. *Coloquintida*, taken in a large Dose, is one of the most violent Purges now known. It not only often brings away pure Blood, but produces violent Convulsions, Ulcers in the Intestines, and fatal Hypercatharsis. When the Pulp is taken in Substance, it sticks to the Coats of the Stomach and Intestines; and therefore it has been judged convenient to divide it



as much as possible. Thus having first reduc'd it to a fine Powder, it is made up into Lozenges call'd *Trochisci Albandal*; but even these are hurtful to Persons of weak abdominal Viscera. When it is thought proper to give it in Clysters, it ought to be boil'd in a Linen Bag, that no large Pieces of the Pulp may mix with the Decoction. These Clysters are often ordered in Apoplectic Cases. Some say, that Coloquintida will purge Children, by being reduc'd to a Paste with Ox-gall, and apply'd to the Navel.

The other Species of this Plant is the

*Colocynthis fructu rotundo*; major. *C. B. Pin.* 313. *Tourn. Inst.* 109. *Chomel.* 67. *Boerh. Ind. A.* 2. 80. *Hist. Oxon.* 2. 27. *Colocynthis major rotunda*, Park. *Theat.* 160. THE GREATER COLOQUINTIDA.

This is also imported from the *Levant*, and is said to agree with the preceding in Virtues.

COLOCYNTHIS MONOCOCCOS. See *SICYOIDES AMERICANA*; FRUCTU ECHINATO; FOLIIS ANGULATIS.

COLOEOS, *κολοῖος*. The GRACULUS, which see.

COLON. The Name of one of the large Intestines. See COELIA.

COLOPHONIA. Colophony, or black Rosin. This Substance, when perfectly cold, is hard, dry, and friable, but easily becomes fluid on the Application of Heat. It is yellowish, or red, pellucid, and almost resembling Glass. It is almost destitute of Taste and Smell, and is in reality no more than a Rosin boiled to this Consistence by intense Heat, after which it becomes more indurated by the Cold, and loses all its volatile Parts; for which Reason it is by some Authors also call'd *Resina friēta*, or *tosla*, dry'd Rosin. That Species of Colophony is accounted best, which is yellowish, pellucid, and consists of large Pieces. It receives its Name from *Colophon*, a City of *Ionia*, because, in former times, the best Colophony was brought from that Place. Concerning this Species of Colophony, *Pliny*, in *Lib.* 14. *Cap.* 20. affirms, that it is more yellow than the other Sorts; that, when it is triturated, it becomes white; and that it is of a nauseous Smell; for which Reason it was not used by the *Unguentarii*. Since the *Antients* make mention of two Sorts of Colophony, one in a dry, and another in a liquid Form, it is probable, that the latter of these was liquid Pitch, call'd also *Grecian Pitch*, which is nothing but the crude Resin of the Pine brought from *Colophon*; whereas the former was the *Resina friēta*, which the *Greeks* call'd simply *εφυκτῆν*. *Galen*, in his *Work De Compos. Med. per Gen. Lib.* 7. *Cap.* 3. informs us, that tho' *Pinea*, *Friēta Resina*, and *Colophonia*, were promiscuously used, there was yet another Species of Colophony at *Chios*, very like to *Mastich*, and which, like it and *Frankincense*, had something of an emollient Quality. But the later *Greeks*, according to *Salmassius*, call'd every Kind of Resin *Colophony*, because the Resin of *Colophon* was accounted the best. Hence the *Arabians* use the Word *Kalphon* for every Species of Resin. The Colophony sold at present is Turpentine boil'd in Water, and afterwards dried; but the Caput Mortuum of the Turpentine is better, that is, the Resin remaining after a Distillation of the etherial Oil, which, when it is urged by a more intense and long-continu'd Fire, is chang'd into true and genuine Colophony. When Colophony, thus prepar'd, is treated with a Fire of Suppression, it yields a thick Oil, along with a heavy acid Water, which discovers the genuine Nature and Properties of a Resin. Whatever Virtues, therefore, Colophony is possess'd of, may be ascribed to the Energy of these two Principles, combined and blended in one common Substance. Hence 'tis obvious, why Colophony; when reduc'd to a Powder, and thrown into the Flame of a Candle, takes Fire, and resembles Lightning: Its Nature is, therefore, understood by that of a Resin. Colophony, reduced to a Powder, is of singular Advantage in Surgery, in Cases where the Bones are laid bare, or the Periosteum, Tendons, and Muscles, injur'd by Burns, Corrosions, Contusions, Punctures, Lacerations, or partial Divisions. It also prevents Defluxions of Serum on the Joints, and induces Cicatrixes, and checks the fungous Excrecences of Ulcers, if apply'd in the same Manner. Besides its drying, consolidating, and lenitive Qualities, it is an Ingredient in several Plaisters and Ointments. *Konigius* affirms, that his balsamic Plaister is of universal Use in discussing Tumors, curing Ulcers and Wounds, and removing arthritic Pains. The Method of preparing it is as follows:

Take of Colophony and new Wax, each three Ounces; of Gum Elemi and Gum Tragacanth, each one Ounce; of Nitre, an Ounce and an half; of native Sulphur, six Drams; of the Powder of red Sanders, red Myrrh, the best Mastich, and Frankincense, each half an Ounce; of the Oil of Bays, six Drams; and of the Balsam of Peru, two Drams. Infuse the Sanders for some time in Spirit of Wine; then add it to the other Ingredients, and form into a Plaister of a proper Consistence.

Some prepare Pills of Colophony, whilst warm, for the Cure of Gonorrhœas, and other Venereal Diseases. The Powder of it is also recommended for expelling the Stone. Some, by

dissolving Colophony in Spirit of Wine, prepare a redish Tincture, which they call *Aurum Potabile*, and recommend against Chronical Diseases arising from Obstructions. *Hoffman*, in his *Clavis Schrod.* asserts, that it is of singular Efficacy in carrying off tartarous Sordes by the Urine. Colophony, minutely triturated, mix'd with double the Quantity of dry Sand, pass'd thro' a Sieve, and distil'd from a Glass Retort, in a Sand-heat, yields first a white and aqueous Liquor, then an oleous and clay-colour'd Liquor, then one of a redish Colour, and, lastly, a thick Substance call'd Balsam of Colophony; which, when again distil'd, together with the rest of the oleous Liquor, after a Separation of the Phlegm, is the Oil of Colophony, so much extol'd by *Margrave* for curing Wounds, and softening Tumors, for which Purposes it may be used both internally and externally. A few Drops may be exhibited for a Dose internally. There is a Preparation of Colophony in the *Antidotarium Bononiense*, under the Title of *Unguentum Colophonice*.

COLOSTRUM. The first Milk of any Animal after bringing forth Young, call'd *Beeplings*. It is remarked, that this Milk is gently cathartic, and purges off the Meconium, serving both as an Aliment and Medicine.

An Emulsion, prepared with Turpentine dissolved with the Yolk of an Egg, is sometimes call'd by this Name.

COLOTES, *κολῶτις*. The same as ASCALABOTES, which see. A Sort of spotted Lizard. Hence

COLOTOIDES, *κολωτοειδής*. Variegated like the Skin of this Animal. It is apply'd, by *Hippocrates*, to the Excrements.

COLPOS, *κόλπος*. The same as SINUS, which see.

COLUBRINA. The *Dracontium* is call'd by this Name, according to *Blancard*; as is likewise the *Bistort*.

COLUBRINUM LIGNUM. A Sort of Wood, or Root, thus distinguish'd:

*Lignum Colubrinum*, Offic. *Nux Vomica minor Moluccana*, *Lignum Colubrinum Officinatum*, *Parad. Bat. Prod.* 357. *Nux Vomica altera*, *Raii Dendr.* 117. *Radix Colubrina*, *Lignum Colubrinum*, *Mont. Exot.* 7. *Solanum arborescens Indicum*, *foliis Napææ majoribus magis mucronatis, fructu rotundo, duro, spadiceo-nigrescente, semine orbiculari compresso, maximis*, *Breyn. Prod.* 2. 93. *Commel. Flor. Mal.* 249. *Fruetus orbicularis peregrinus cum granis Nucis Vomice similibus*, *J. B. I.* 341. *Mordira-Caniram*, *Hort. Mall.* 8. 47. *Tab.* 24. *An Clematitis Indica foliis Persicæ, fructu Periclymeni*, *C. B?* *Lignum Colubrinum primum Garcie*, *Park. C. B.* SNAKE-WOOD.

This is a Wood, or rather a Root, which comes from the *East Indies*, of a heavy, close, and ponderous Substance. It is covered with an Iron-colour'd Bark, having many Ash-colour'd Spots on it, and of a bitter Taste, being supposed to be the Root of some Species of the Tree which bears the *Nux Vomica*; and though it be commended by some as good against the Biting of Serpents, and as a Cure for Tertian Agues, yet *Dr. Anton. de Heide*, after several Trials which he made with it, gives it but an indifferent Character, as a malignant, soporiferous, and poisonous Thing, and therefore better let alone, and neglected, as it is in our Shops. *Miller's Bot. Off.*

COLUM. A Filtre.

COLUMBA, Offic. *Columba domestica*, *Schrod.* 5. 316. *Bellon. des Oyse.* 314. *Columba, sive Columbus*, *Ind. Med.* 39. *Columba domestica seu vulgaris*, *Raii Ornith.* 180. *Ejusd. Synop.* A. 59. *Will. Ornith.* 131. *Columba domestica*, *Aldrov. Ornith.* 2. 462. *Jonst. de Avib.* 62. *Schw. A.* 237. *Columba domestica*, *Livia*, *Charlt. Exer.* 84. *Columba vulgaris*, *Gesn. de Avib.* 245. *Columba, vulgaris*, *Livia*, *Mer. Pin.* 174. THE PIGEON OR DOVE.

The Parts in Use are, the living Pigeon, the Blood, the Coat of the Stomach, and the Dung. The live Pigeon, dissected in the Middle, and applied to the Head while the Blood is hot, mitigates the Violence of Humours, and discusses Melancholy and Sadness; whence it is a very convenient Remedy in the Phrensy, Head-ach, Melancholy, and the Gout. The warm Blood, instil'd into the Eyes, helps Pain and Lippitude, discusses Cataracts and stagnated Blood, cures recent Wounds, has a peculiar Virtue in stopping an Hæmorrhage from the Membranes of the Brain, and mitigates the Pain of the Gout. The Coat of the Stomach, dry'd and pulveriz'd, is recommended in the Dysentery. The Dung is violently heating, on which account it is a Caustic and Discutient, and excites a Redness of the Skin by attracting the Blood thither; whence it is of frequent Use in stimulating Plaisters and Cataplasms. Triturated and sifted, and applied with the Seed of Nasturtium, is relieves under inveterate Disorders, as the Gout, Hemicrania, Vertigo, Head-ach, and others; internally it waxes the Stone, and provokes Urine. *Schrod. Dale.*

There are several Sorts of Pigeons, which are distinguished into two general Classes, the tame and wild Pigeon.

You are to chuse, both of the one and the other, those which are young, tender, fat, fleshy, well fed, and that have been bred in a pure and serene Air.

They are very nourishing, somewhat binding, strengthening, and provoke Urine: They are looked upon to be good for cleansing the Kidneys, and to expel the gross Matter which sometimes adheres to them.

Some



Some Authors pretend, that the Use of Pigeons cures Convulsions, and is a Preservative against pestilential Distempers; but I will not assure the Reader, that these Pretences are well-grounded.

As a Pigeon grows old, so proportionably does its Flesh become more dry and solid, harder of Digestion, and productive of gross and melancholy Humours; and hence it is, that many Authors have condemned the Use of Pigeons, and look upon them to be bad Food.

They contain much Oil and volatile Salt, and an indifferent Quantity of earthy Parts.

They agree at all times with any Age and Constitution; but those who are melancholy ought to make use of them more moderately than other Persons.

#### REMARKS.

The tame Pigeon is a Bird well known, for being much used by way of Food. When 'tis young, the Flesh is tender, juicy, and easy of Digestion; because it contains a just Proportion of saline, oily, balsamic, and phlegmatic Principles; but as it grows older, so proportionably the Juices are more gross, earthy, and subject to render the Flesh hard, and heavy in the Stomach. In the mean time, this Flesh being very nourishing, and affording solid and durable Food, it may be proper for those who have a good Digestion, are in continual Exercise of Body, and spend themselves much.

We may say in general, that all Pigeons are of a dry Nature; and that, in this Particular, they do not differ one from another, but as they are more or less so. Their Flesh is nourishing, because it contains a great many oily and balsamic Parts. It also yields good and solid Nourishment, because that being compact and close set together, it sticks in such a manner to the solid Parts, that it cannot, without Difficulty, be separated from it. Lastly, the Flesh of a Pigeon fortifies and binds, not only because it contains many exalted Principles, but also because that being but a little moist, and full of some earthy Parts, the superfluous Moistures, which relax the Fibres of the Entrails, are swallowed up thereby. *Lemma on Foods.*

**COLUMELLA.** The *UVULA*, which see.

**CUMELLARES Dentes** are the *Dentes Canini*.

**COLUMNÆ CORDIS.** These are small, long, and round fleshy Productions in the Ventricles of the Heart. See *COR*.

**COLUMNA NASI** is the lowest and fleshy Part of the Nose, which forms a Part of the *Septum*.

**COLUMNA ORIS** is the *UVULA*.

**COLUS JOVIS**, in Botany, is the *Sclarea*; *glutinosa*; *floris lutei, variegati*; *barba ampla, cava*. See *SCLAREA*.

**COLUTEA.** Bladder-sena, or Bastard-sena.

The Characters are,

The Pods are membranaceous, and inflated like small Bladders.

Of this *Boerhaave* mentions six Sorts.

1. *Colutea*; *vesicaria*. *C. B. Pin.* 396. *J. B.* 1. 380. *Chab.* 81. *Raii Hist.* 2. 1720. *Jonsf. Dendr.* 377. *Tourn. Inst.* 649. *Elem. Bot.* 509. *Boerh. Ind. A.* 2. 39. *Colutea*, *Olliv. Ger.* 1116. *Emac.* 1299. *Ind. Med.* 39. *Colutea vesicaria vulgaris*, *Park. Theat.* 226. *Senna Mauritanorum*, *Chomel.* 1. 42. *Pseudo-Senna*, *frve Senna Europaea*, *Boerh. Hist. Plant.* 468. *Senna Pauperum*, *Ejusd.* **BASTARD-SENA.**

This is a Bush, or small Tree, which sends from the Root many Ash-colour'd slender Branches, on which grow long pinnated Leaves of nine or eleven Pinnæ, round, and a little hollow'd in at the End. The Flowers grow in Bunches on the upper Part of the young Shoots, being yellow and papilionaceous, succeeded by large swell'd thin Bladders, somewhat flat-tish on the upper Part; and sharper and boat-fashion'd underneath, with a crooked Appendix at the End, full of black Kidney-like Seed. It grows wild in several Parts of *Italy*, but is with us only in Gardens, and flowers in *July*.

The Leaves of this *Bastard-sena*, but especially the Seeds, purge upwards and downwards with much Violence; and therefore ought only to be administered to strong robust Bodies, and then with good Correctives. *Miller's Bot. Off.*

2. *Colutea*; *vesiculis rubentibus*. *J. B.* 1. 380. *Descr.*

3. *Colutea*; *Orientalis*; *florē sanguinei coloris, lutea macula notato*. *T. Cor.* 44. *H. R. D.* **EASTERN BLADDER-SENA, WITH BLOOD-COLOUR'D FLOWERS SPOT-ED WITH YELLOW.**

4. *Colutea*; *Aethiopica*; *florē Phœniceo; folio Barbae Jovis*. *Breyn. Cent.* 70. *Prod.* 30. *H.* **ETHIOPIAN BLADDER-SENA, WITH SCARLET FLOWERS, AND LEAVES LIKE THE SILVER-BUSH.**

5. *Colutea*; *Africana*; *annua*; *foliis parvis, mucronatis; vesiculis compressis*. *H. A.* 2. 87. **AFRICAN ANNUAL BLADDER-SENA, WITH SMALL-POINTED LEAVES, AND COMPRESS'D PODS.**

6. *Colutea*; *Zeylanica*; *argentea tota*. *H. L.* 169. *Boerhaave's Index alter Plantarum, Vol. 2.*

**COLUTEA**; *SCORPIOIDRÆ*. See *EMERUS*.

VOL. II.

**COLYMBADES**, *κολυμβάδες*. Pickled Olives. See *OLIVA*. **COLYMBÆNA**; *κολυμβάινα*. The Name of a Sort of Shrimp in *Galen*.

**COMA**, *κῶμα*, in *Galen's Exegesis*, is expounded by *κατὰ-σεσά*, *Cataphora*, that is, a preternatural Propensity to Sleep; and, in the third Chapter of his Treatise of a *Coma*, he informs us, that *Coma* includes every *Cataphora*, both the sleepy and the wakeful. He gives the same Exposition of it in *Com. 1. in Prorrhēt.* where he says, *ὡς εἶναι τὸ κῶμα τὴν εἰς ὕπνον καταφορὰν, &c.* "So that a *Coma* is a *Cataphora*, in which the Patients are incapable of acting as those who are awake, but have a Desire to shut their Eyes in hopes of sleeping; but it sometimes happens, that they are unable to sleep after their Eyes are shut, but continue for the most part waking, which Disorder *Hippocrates* call'd *εἰς ὕπνῳδες κῶμα* (a *Coma* not of the sleepy Kind); but we have written a whole Treatise of the Signification of a *Coma*, in which we have shewn, by several Passages, that *Hippocrates* call'd every Sort of *Cataphora* by the Name of *Coma*." Again, *Com. 3. in Prorrhēt.* he tells us, that he has written a Treatise of a *Coma*, according to the Sentiments of *Hippocrates*, wherein he has shewn, that a *Coma* signifies *τὴν εἰς ὕπνον καταφορὰν*, "a violent Propensity to sleep," under which the Patients are incapable of waking with their Eyes open, and uncertain of sleeping while they are shut, but sometimes continue waking. Once more, the same Author, in *Com. 1. in Lib. 3. Epid.* says; "I call *εἰς ὕπνον καταφορὰν* "a Disorder when the Patients cannot continue waking, having their Eyes not open, but winking, being either in a deep Sleep, a Slumber, or waking. Wherefore there is required Distinguishing, with the Help of good Judgment, and great Experience, in order to know, of a Certainty, under what kind of comatous Indisposition the Patient labours."

As there are two Sorts of the *Cataphora*, so there are of the *Coma*, in *Hippocrates*; for there is the *Coma* (*κῶμα*) *βαρὺ, ὕπνῳδες, ἢ δυσδιγερτὸν*, "heavy, profoundly sleepy, or difficult to be rous'd from." To which is oppos'd *λεπτὸς ἢ μικρὸς ὕπνος*, "a small or gentle Sleep or Slumber." This Sort of *Coma* is usually attendant on a Lethargy. Hence *κοιματώδεις ὕπνοι*, in *Coac.* signify a profound Sleep, attended with a Sopor, from whence it is difficult to rouse the Patient. For, according to *Galen, Com. ad Aph. 3. Lib. 2.* it is call'd a *Coma*, when it is difficult to rouse the Patient out of it; but when it exceeds what is agreeable to Nature only in respect of Time, it is call'd barely a long Sleep: *Coma*, in this Sense, then, comprehends lethargic Affections, especially if it be attended with Disorders of the Head, Refrigerations of the whole Body, a Torpor, Heaviness, and Dulness of Sensation, such as in *Coac.* are call'd *κοιματώδεις νόσοι*, "comatous torpid (Indispositions)." "It is customary with the Author of the *Prorrhēticon*," says *Galen*, "to use the Word *Coma* to signify a Lethargy; for the Word *λῆθαργος* occurs not once in the whole Book." They, then, who are oppress'd with a Sleep, which is attended with a Sort of Torpor, are said to be *κοιματώδεις*, "under a *Coma*."

There is another Sort of *Coma*, which *Hippocrates* calls *κῶμα εἰς ὕπνῳδες, ἢ ἀγρυπνον*, "the unsleepy or wakeful *Coma*." This is a usual Symptom of a Phrenitis, and seems to be an Affection made up of Sleeping and Waking. We have it thus express'd by *Hippocrates, Lib. 3. Epid. κοιματώδεις ἐπιπολὺ, ἢ πάλιν ἀγρυπνοί*, "they were, for the most part, under a Sopor, and then again molested with want of Sleep." Again, in the same Book, *κατερχε δὲ ἢ τὸ κῶμα συνεχῶς εἰς ὕπνῳδες, ἢ μετὰ πόνον ἀγρυπνοί*, "they either laboured under a continual wakeful *Coma*, or want of Sleep, attended with great Uneasiness." *Galen, Lib. de Comate, Cap. 3, 4. and Com. 3. in Lib. 3. Epid.* explains this Affection in the following Manner: "When the Patients cannot wake with open Eyes, but lie winking in hope of sleeping, but continue waking, we call this Affection a *wakeful Coma*; and if there be an Uneasiness in the Case, they will more manifestly appear to be awake, and not so much as in a Slumber. Persons, under such a comatous Disposition, seem constituted in a middle State between those who are perfectly awake, and those who are asleep." The same Author, *Com. 1. in Lib. 1. Prorrhēt.* says, that this Disorder is compounded of a Phrensy and a Lethargy, and is by some call'd *Typhomania*, contrary to the Sentiment of *Hippocrates*. See his *Lib. de Comate, Cap. 4.* But, in his *Isagoge Pulsum*, he tells us, that this Affection wants a proper Name, and that the Knowledge of it must be learned from its concomitant Symptoms.

For a farther Account of a *Coma*, see *LETHARGUS*.

For the Causes of, and Treatment due to, a *Coma*, considered as a Symptom in Fevers, see *FEBRIS*.

**COMA AUREA.**

The Characters are,

It hath a fibrous perennial Root; the Leaves, which are in great Numbers, are produced alternately on every Side of the Branches; the Cup of the Flower is not spacious; the Flowers are yellow, and produced either singly, or in an Umbel, upon the Tops of the Branches: To which may be added, it hath the Appearance of a Shrub. *Miller's Dictionary, Vol. 1.*



*Boerhaave* mentions nine Species of this Plant.

1. *Coma aurea*; Germanica. *Park.* 688. *Linaria, foliis capitulo luteo, major.* C. B. P. 213. *Linaria aurea.* H. Eyft. Æst. o. 1. F. 14. Fig. 1. *Linaria, aurea, Tragi, frut. Linaria tertia.* J. B. 3. 151. *Linofyris Nuperorum.* Lob. Ic. 409. *Virga aurea, Linariæ foliis.* Raii Meth. 189. *Conyza, linariæ folio.* T. 455. *Virga aurea, Linariæ foliis, floribus congestis, & umbellatim dispositis.* M. H. 3. 25. GERMAN GOLDYLOCKS.

2. *Coma aurea*; Africana; fruticans, foliis linariæ angustis; major. H. A. 2. 89. *Conyza Æthiopica, flore bullato, aureo, pinastri brevioribus foliis, late viridibus.* Plukn. 327. H. R. D. AFRICAN SHRUBBY GOLDYLOCKS, WITH NARROW TOAD-FLAX LEAVES.

3. *Coma aurea*; Africana; fruticans; foliis Crithmi marini. H. A. 2. 89. H. R. D. AFRICAN SHRUBBY GOLDYLOCKS, WITH SAMPHIRE-LEAVES.

4. *Coma aurea*; Africana; fruticans; foliis glaucis & in extremitate trifidis. H. A. 2. 97. H. R. D. AFRICAN SHRUBBY GOLDYLOCKS, WITH SEA-GREEN LEAVES, which are divided into three Parts at their Extremities.

5. *Coma aurea*; Africana; fruticans; foliis viridibus & in extremitate trifidis; floribus majoribus. H. R. D. SHRUBBY AFRICAN GOLDYLOCKS, WITH LONG NARROW SEA-GREEN LEAVES, which are divided into many Parts, each of which are trifid at their Points.

6. *Coma aurea*; Africana; fruticans; foliis glaucis, longis, tenuibus, multifidis, apice pinnularum trifido. H. R. D.

7. *Coma aurea*; Africana; fruticans, foliis tenuissimis, longis, trifidis. H. R. D.

8. *Coma aurea*; Africana; fruticans; foliis glaucis succulentis, digitatis, odoratis. H. R. D.

9. *Coma aurea* similis frutex; ambarum spirans. Frutex Africanus ambarum spirans. Volk. 175. Plukn. 183. H. R. D. h. *Boerhaave's Index alter Plantarum, Vol. 1.*

There is nothing said of the Virtues of these Plants; and yet, from their aromatic Quality, and fragrant Smell, there seems Reason to believe, that they are not destitute of useful Properties. The eighth Species is the most fragrant, and is proper for Pains of the Colic proceeding from Acidities. The ninth is used by the Inhabitants of *Africa* in cold Diseases; for it is extremely sweet-scented, but, after the Leaf is bruised, the Smell soon vanishes. It is effectual in Obstructions of the Urine and Menfes, dissolves coagulated Blood, and kills Worms.

COMA is the Hair of the Head: Whence

COMÆ imports the Tops of Plants, or the Leaves of Trees. Raii Hist. Plant.

COMARUS *Theophrasti.* See ARBUTUS.

COMBUSTIO, in Chymistry, imports Burning, one Sort of Calcination.

COMEDONES. See CRINONES.

COMETZ. Half a Drop. Rulandus.

COMISDI. Gum Arabic.

COMISTE, κομιστή. The Epilepsy; so call'd because People were subject to be seized with this Disease in the public Assemblies of the People, call'd *Comitia*.

COMMAGENUM, κομμαγιώνιον. The Name of an Ointment mentioned by *Galen*, in his Treatise *De Compositione Med.* S. L. Lib. 2. Cap. 1. It is also call'd *Syriacum Unguentum*.

COMMANDUCATIO. Mastication.

COMMANSUM. The same as APOPHLEGMATISMUS. *Blancard.*

COMMELINA. A Plant so call'd by Father *Plumier*, by way of Compliment to Dr. *Commeline*, a famous Professor of Botany at *Amsterdam*.

The Characters are,

The Leaves are produced alternately, and surround the Stalks at their Base, being in Shape somewhat like the Ephemerum: The Stalks trail upon the Ground, and grow very branchy: At the setting on of the Branches, between the Wing of the Leaf and the Stalk, is produced a Flower, which consists of two Leaves, which are placed in the Form of two Wings, much after the Manner of the Butterfly-flowers: From the upper Part of the Flower are produc'd three short Stamina, (or Threads) upon which are fastened yellow Apices, which resemble the Head of a Mushroom: In the under Part of the Flower are produced three other Male Stamina, which are thicker and longer than the others: The Ovary is produced in the Centre of the Flower, which is extended into a long intorted Tube, and becomes an oblong Fruit, divided into two Cells, in each of which is contained one oblong Seed. *Miller's Dictionary, Vol. 1.*

*Boerhaave* mentions but one Species of this Plant, which is

*Commelina*; graminea; latifolia; flore cœruleo. *Plum. N. G. Pl. 48.* *Ephemerum, Africanum, annuum, flore bipetalo.* H. L. BROAD GRASS-LEAV'D COMMELINE, WITH BLUE FLOWERS. *Boerb. Ind. alt. Vol. 1.*

There are no Medicinal Virtues attributed to this Plant, that I can find.

COMMI, κόμμι. Gum. When alone, and without any Epithet, it implies Gum Arabic. The κόμμι λευκόν mention'd by *Hippocrates*, in his second Book *De Morbis Mulierum*, is the same Gum. See GUMMI.

COMMUNUTIO. Comminution. The Reduction of a solid Body into finer Particles by any means whatever.

COMMISSURA. Juncture, Joint, or Articulation.

COMMOSIS, κόμμιωσις. The first Stratum of gummy Matter, with which Bees line their Hives.

COMMOSIS also imports that Art which is employed in concealing natural Imperfections, with respect to Beauty. This Authors distinguish from the Cosmetic Art, as this last consists in preserving the Beauty which is natural.

COMMUNICANTES FEBRES, according to *Bellini*, are two Fevers, which infect a Person at one and the same time, the Paroxysm of one beginning immediately after the Paroxysm of the other ceases.

COMPASSIO. Compassion, in Nosology, is the Suffering of one Part, on account of an Affection of some other Part. This is call'd suffering by Consent.

COMPEPER, κομπεπερ. A Name in *Myrsus* for Cubebs. They are call'd by *Aetnarius*, *Compeba*, κομπεβα.

COMPLEXIO. A Constitution or Temperament.

COMPLEXUS. Complex, or complicated.

COMPLEXUS MUSCULUS. There are two Pair of Muscles call'd by this Name. The first is term'd, simply,

COMPLEXUS.

This is a pretty long and broad Muscle, lying on the posterior lateral Part of the Neck, all the Way to the Occiput. It is complicated by reason of the Decussations of its different Portions, from which it has its Name, but is commonly look'd upon to be one Muscle.

It is fixed below by small short Tendons to the transverse Apophyses of all the Vertebrae of the Neck, except the first, to which it is fixed only near the Root of its transverse Apophysis. From thence it runs up obliquely backward, crossing under the Splenius, and often communicating with it, by some Fasciculi of Fibres.

It is afterwards inserted above, by a broad fleshy Plane, in the posterior Part of the superior transverse Line of the Os Occipitis, near the Crista or Spine of that Bone. At its Insertion it joins by one Edge the Complexus of the other Side, and by the other the Splenius, which covers it a little.

Before we dissect the Splenii, we may see, in the Interstice left between their superior Portions, the two Complexi united together on the Spine of the Os Occipitis.

The other is, the

COMPLEXUS MINOR SIVE MASTOIDÆUS LATERALIS.

This is a long, slender, narrow, indented Muscle, lying along all the Side of the Neck up to the Ear, where it increases a little in Breadth. It is something like the *Complexus Major*, and *Vesalius* took it to be a Portion of that Muscle.

It is fixed by one Extremity in all the transverse Apophyses of the Neck, except the first, by the same Number of Digitations or Branches, mostly fleshy, and disposed obliquely.

From thence it ascends, and, having reached above the transverse Apophysis of the first Vertebra, it forms a small broad Plane, by which it is inserted in the posterior Part of the Apophysis Mastoidæus. It is here covered by the Splenius, and covers a little the Obliquus superior.

This Muscle is often mistaken for a Portion of the Longissimus Dorsi. *Winslow's Anatomy.*

COMPLICATIO MORBI. A Complication of Diseases. Diseases are said to be complicated, when two or more subsist at once in the same Subject.

COMPOSITI MORBI. Compound Diseases. The same as complicated.

COMPOSITA MEDICAMENTA. Compound Medicines, which consist of many Ingredients; they are thus call'd by way of Distinction from simple Medicines, which contain only one Ingredient.

COMPREHENSIO. The same as CATALEPSIS.

COMPRESSÆ. Compresses, in Surgery, are folded Pieces of Linen Cloth, contrived to make a gentle Pressure upon any particular Part. Their Forms and Uses are specify'd under the Articles of Disorders and Operations where they are employ'd.

COMPUNCTIO. The same as PARACENTESIS, which see.

CONARIUM. The Glandula Pinealis, so call'd from its Form.

CONCAVATIO. The same as ARCUATIO, which see.

CONCAUSSA. A Cause which co-operates with another in the Production of a Disease.

CONCENTRANTIA. Absorbents of Acids are sometimes call'd by this Name.

CONCENTRATIO. This signifies that Operation, by which the most active Parts of any Liquor, and those from which it derives its principal Qualities, are collected together, and



and separated from the other Parts, which dilute and render them weaker. When, for Instance, spirituous, oleous, and saline Liquors, being exposed to the Cold, have their aqueous Parts congeal'd; whilst their spirituous, oleous, and saline Parts, being free from the Congelation, become more pure, and free from the aqueous Parts before mix'd with them. Because the aqueous Parts are thus separated, Concentration may properly be said to be a Species of Dephlegmation. It is also call'd Concentration, when, by an Addition of earthy, dry, and absorbent Substances, the Acid of any Liquor is attracted and imbib'd; whilst the aqueous Parts are left, and the Acid, as it were, convey'd to another Body. The Use of this Species of Concentration is obvious, in Cases where Acidities are to be subdued or corrected: Hence Absorbents are call'd concentrating Medicines. To this belongs that Species of Concentration, in which, by an Acid, any Body is corroded, and remains combin'd with it. Thus Vinegar, combined with, and then distill'd from Verdegrise, is much stronger than it was before, and, for that Reason, is call'd concentrated. There is another Species of Concentration, which is, when alkaline Salts are saturated with acid Spirits, which are so retain'd in them, that both, in Conjunction, constitute neither an Acid, nor an Alkaline, but a neutral Salt. The Use of this Species of Concentration is obvious, that is, to procure neutral Salts. Lastly, Concentration, in an extensive Sense, denotes an Union or Combination of a Spirit, a Salt, or a Sulphur, with any Body. Thus, in sublimate Mercury, which is form'd of Quick-silver and the Acid of Sea-salt, united together, the Spirit of Salt is said to be concentrated.

CONCEPTIO, Conception. See GENERATIO.

CONCEPTUS. The very first Rudiments of the Fœtus in the Uterus after Conception.

CONCHA.

The *Concha* of the *Latins*, the *κόγχη* and *κόγχη* of the *Greeks*, corresponds to what, in *English*, we call a *Shell-animal*. Among some Authors, the Word *Concha* sometimes denotes the Whole of a testaceous Animal, and sometimes only its Shell; sometimes this Word is restrain'd to Fishes with two Shells. In the last Signification, *Concha* imports every testaceous aquatic Animal with two concave Shells, whether large or small, so join'd by a kind of natural Hinge, that they may shut and open. This Genus comprehends many Species under it. As for the Natural History of this Animal, it is to be found in the *Memoires de l'Academie Royale des Sciences*, for the Years 1706. 1710. and in the *Speſtacle de la Nature*, T. 1. The Diseases most generally found incident to Shell-fish are, first, in such of them as are old, Mofs adhering to the outer Part of the Shell, like that which generally adheres to Stones, which, penetrating the Shell, makes way for the Water, and proves fatal to the Animal. Secondly, Sea-weeds adhering to the external Surface of the Shell, and to Stones or Rocks at the same time, retard the progressive Motion of the Animal. Thirdly, a Species of Itch, or Tubercles, arising on the internal Surface, which, increasing, produce an Exfoliation of the Shell. Fourthly, a Dissolution of the Shell, which gradually becomes softer and softer. We must here observe, in general, that Sea Shell-fishes are eatable, when boil'd and dress'd with a Sauce, according to every one's Taste; but they are of difficult Digestion, and of an alcalescent Nature. The Oyster is also eaten crude. In Medicine, the Shells of these Fish are found to be drying, absorbent, correcting, and precipitating; for which Purposes, those beat to a fine Powder are preferable to those levigated on a Marble with Water, which are commonly call'd *Conchæ præparatæ*. What are usually kept in the Shops, under this Title, are the Shells of Muscles, and are recommended for exciting a Diaphoresis in intermitting Fevers, if a Scruple, or half a Dram, is exhibited, about an Hour before the Paroxysm, in Carduus-water, or that of the lesser Centaury; ordering the Patient, at the same time, to be kept warm, in order to encourage a Diaphoresis. But, when the Shells are calcined, they become Lime, and do not absorb and correct, but stimulate and resolve, in consequence of the Acrimony they have acquired by Calcination. In this Case they are so far from correcting the Acrimony of the Juices, that they rather increase the Heat of the Stomach and Fauces.

*Olaus Wormius*, in his *Museum*, informs us, that the Ashes of Shell-fish are possess'd of a caustic Quality; that they are recommended against Leprosies, Freckles, and Spots of the Skin; that, when they are previously wash'd, like Lime, they cure Ulcers, and Eruptions on the Head; and that, in the *Netherlands*, they are used as a Cure for the Hæmorrhoids. *Pliny*, in the seventh Chapter of his thirty-second Book, describes their detergent Quality in the following Words: "The Ashes of the Shells of Fish, if used by way of Ointment, with Honey, remove Spots in the Faces of Women in seven Days time, render the Skin smooth, and, on the eighth, the Part is to be anointed with the Whites of Eggs." There are various Species of Shell-fishes describ'd by Naturalists, such as the

CONCHA ANATIFERA, so call'd, because 'tis fabulously

reported, that a Species of Bird, of the Duck-kind, is form'd in it.

CONCHA ERYTHRÆA. See CONCHA VENERIS.

*Concha Lavigatoria*, or *Lavigata*. A Shell-fish of an oval Form, with a very smooth Shell, used by the *Egyptians* in smoothing their Linen, and by the *Greeks* and *Turks* in polishing their Papers.

CONCHA FOSSILIS, or LAPIDEA. See CONCHITES.

CONCHA MARGARITIFERA. This may be apply'd to every Shell-fish, from which Pearls are obtain'd; but, because the best Pearls are generally found in the *Indies*, it is confined, for the most part, to the *Concha Indica magna*, whose Shells are moderately hollow, thick, and, externally, somewhat yellowish, rough, and uneven, but not striated; internally they are smooth, and shine like Pearls. The Animal contain'd in this Shell is sometimes eaten raw by the *Indians*, and sometimes broil'd. It is said to be sweet and grateful to the Taste. It is a Species of Oyster, found principally in the *Persian Sea*. The Shell of this Fish is the *Mater Parlarum* of the Shops, which see.

CONCHA PERSICA. A Shell-fish so call'd from the *Persian Sea*, in which 'tis produced. *Aldrovandus* classes it among the univalve; but *Bonannus* more justly among the bivalve Fishes.

CONCHA PICTORUM, so call'd, not from its being used in mixing or containing the Colours of Painters, but from the Shell being rasp'd down for mixing up Colours, as an Ingredient.

CONCHA SAXATILIS. See CONCHITES.

CONCHA VENEREA, or VENERIS. This is what we call *Venus's Shell*. It is a Fish, whose Shell is univalve, wreath'd, and has a small longitudinal and denticulated Chink or Aperture in it. It is also call'd *Concha Porcellana*, from its Aperture in some measure resembling the Mouth of a Hog; and *Concha Erythraea*, from its being found in the *Red Sea*, which is call'd *Erythraeum*. It is also call'd *Concha Cytheriaca*, from *Venus*, who received the Epithet *Cytheræa* from *Cythera*, a *Grecian* Island. That this Species of Shell-fish was used by the Antients as an Aliment, we read in *Seneca*, *Epist.* 95. *Mundius* asserts, that they prove a Stimulus to Veneris, and provoke Urine. *Rondeletius* informs us, that these Shells are an Ingredient in the *Pilulæ de Bdellio*, for removing Fluxes, and curing Ulcers of the Uterus. But, instead of the *Concha Veneræ*, Apothecaries generally use Cockles. Excellent Dentifrices are prepared from this Species of Shell; which is also useful for curing Ulcers in the Canthus of the Eye, and the Fistula Lachrymalis. It is remarkably drying, without exciting any Heat. *Wormius* informs us, that he has heard Spoons of these Shells highly commended for curing the Chin-cough in Children, if they sup Broths, or other proper Fluids, with them. The Powder of these Shells must be own'd to possess an absorbent drying Quality; but that, on account of their Beauty, or any other Circumstance, their Powder is preferable to that of other Shells, is by no means probable.

CONCHA, *κόγχη*. This was a sort of liquid Measure among the *Athenians*, which contain'd two *Mystra*, or half an Ounce. As much Oil as it was capable of holding, weigh'd five Drams one Scruple and twenty Grains, according to *Gorr. Defin. Pitisci Lex. & Eifenschom*. Others think, that the *Concha* contain'd three Spoonfuls, ninety-six of which fill'd a Pint-vessel (Sextarius); a Sextarius was, therefore, equivalent to thirty-two *Conchæ*, and six Sextarii made one Congius, a Measure equal to our three Quarts, according to *Salmaf. Exerc. Plinian.* and *Bodæus*, in *Theophrast.* According to *Fernclius*, the *Concha* was equivalent to two *Mystra*, or five Spoonfuls; which, according to *Jacobus Sylvius*, are equivalent to six Drams. According to *Galen*, in his Work *de Ponderibus & Mensuris*, Cap. 11. the *Concha magnæ* contain'd the same Quantity with the *Acetabulum*, which, in liquid Measure, was an Ounce and an half, and, in Weight, fifteen Drams. The *Concha minor* was, in liquid Measure, half an Ounce, and, in Weight, five Drams.

CONCHARUM ANTIFEBRILE. This Medicine is in the *Pharmacop. Bateana*, and directed to be prepared in the following manner:

Pour Vinegar upon Muscle-shells, and macerate them for twenty-four Hours. Wipe off the external Mucus; dry and reduce them to a Powder; during which Operation add a Spoonful of Carduus-water, to prevent the Flying-off of the volatile Part of the Powder. The Dose is one Dram. This is an excellent Febrifuge, and powerfully promotes a Diaphoresis.

CONCHIS. This, among the *Romans*, was a Name given to the entire Bean, wrapt up in its Capsula or Follicule. Tho' it was principally used as an Aliment by the poorer Sort, yet, according to *Apicius de Opsoniis & Condimentis*, it is a delicate Food, much esteem'd by the Luxurious, when boil'd with aromatic Substances.

CONCHITES.



**CONCHITES.** This is also call'd *Concha Fossilis, Lapidea*, and *Saxatilis*, and, in *English*, *Cockle-stone*. It is a Stone, in Figure, resembling a certain Shell-fish.

**CONCHOIDES.** This, according to *Breynius*, in his *Dissertatio de Polythalamis*, is a Species of Shell-fish, whose Shell is bivalve, and is at the same time made up of smaller testaceous Portions.

**CONCHYLIA**, *κογχύλια*, and *ὀστρακοδέσματα*, are what, in *English*, we call Shell-fish. These are Animals without Feet, inclosed in a hard, friable, and kind of stony Covering, sometimes more, and sometimes less thick, smooth, and even within, to which they adhere, and are join'd by muscular Ligaments. The several Species of these Animals, the Methods of their Production and Nourishment, together with the several Particulars relating to their Natural History, are to be found in *Hebenstreit's Dissertatio de Ordinibus Conchyliorum*, in *Wormius's Museum*, in *Rondeletius's Historia Piscium*, and in the Works of *Palissy*, *Belonius*, *Lister*, *Leeuwenhoek*, *Helmont*, *Bomannus*, *Cyprianus*, and others, who have been industrious in enriching Natural History with their Observations.

With respect to the Use of Shell-fish as an Aliment, we may observe, in general, that the Antients, especially the *Romans*, look'd upon them as an uncommon Delicacy. Hence we read, in *Athenæus*, *L. 3. C. 9.* that they were used in the rich and delicate Entertainments of Widows. The *Romans* fed Shell-snails for the Purposes of Luxury; and *Pliny*, in the 34th Chapter of his ninth Book, does not scruple to affirm, that the Use of Shell-fish was a very considerable Source of Luxury, and Depravity of Manners: And, in the 57th Chapter of his eighth Book, he informs us, that *Marcus Scaurus*, during his Consulship, prohibited the Use of Shell-fish for Supper. The Juice of Sea Shell-fish is certainly possess'd of a stimulating Quality, and proves a powerful Incentive to Venery, especially when prepared with Aromatics. But as Shell-fish were the Incentives to Luxury and Lust, among the more civiliz'd and delicate Nations; so they were the necessary Food and Aliment of some of the more barbarous Countries. Thus *Strabo*, in his 16th Book, gives us an Account of some People in *Asia*, who, putting Shell-fish into a Pit in the Sea, fed them with small Fish, and used them when the other Fishes, on which they lived, were scarce. And *Diodorus Siculus*, in *Lib. 3. Cap. 16.* tells us, that some *Ethiopians*, when labouring under a Penury of Aliments, gather large Shell-fish, whose Shells they break with Stones, and whose Flesh, which tastes like that of Oysters, they eat raw. *Sprat*, in his History of the Royal Society, informs us, that the *Indians*, about the Island *Java*, eat large Shell-fish pickled in Brine, as hard as a Piece of Horn, and whose Taste resembles that of the Flesh of a wild Boar. *Celsus*, in the 18th Chapter of his second Book, affirms, that Shell-fish nourish but little: And *Hippocrates*, in his Book *de Dieta*, *L. 3.* asserts, that they are dry, but their Juice renders the Body soluble; that Muscles, Cockles, and Lampins, pass more easily off by Stool than the other Species; and that Muscles also excite a Discharge of the Urine. *Diocles Carystius*, according to *Athenæus*, *L. 3. Cap. 9.* informs us, that Muscles, Cockles, Ballard-cockles, and Oysters, are more efficacious in rendering the Body soluble, and exciting a Discharge of Urine, than other Shell-fishes. *Horace* was no Stranger to this Quality of Shell-fishes; for, in *L. 2. Satir. 4. l. 27.* he gives the following Advice:

----- *si dura morabitur Alvus,*  
*Mitulus & viles pellent obstantia Conchæ.*

According to *Galen*, in his Work *de Alimentorum Facultat.* *L. 3. C. 33.* "All Shell-fishes contain a saline Juice, fit for rendering the Body soluble. This Effect they produce in proportion to the Quantity and Quality of their respective Liquors. The Flesh of the Oyster is, of all others, the softest, and consequently the most purgative; but it is not possess'd of a highly nutritive Quality. Those Shell-fishes, on the contrary, which are harder, are with greater Difficulty concocted; but they are more nutritive, and less purgative. From these a large Quantity of crude Juices are generated; whereas those, whose Flesh is soft, generate Phlegm. Since, therefore, when they are divested of their saline Juice, their Flesh is with Difficulty dissolved, and renders the Body costive; so when they are pickled with Salt or Garum, the Liquor yielded by them, if drank, renders the Body sufficiently soluble, but conveys no Nourishment to it. The Purple-fish and Whelk have a harder Flesh, and thicker Juice, than the other Species, which are more moist and viscid, especially the Oyster." *Janus Plancus*, in his Treatise *de Conchis minus notis*, thinks, that in human Life, and for the Propagation of Mankind, Sea Shell-fishes are of singular Service; since, by using them as an Aliment, Consumptions, and other formidable Disorders, are cured. He also informs us, that it has been observed, by those who make diligent Scrutinies into Nature, that the Inhabitants of the Sea-coasts are more prolific, than those who live at a Distance from them,

on account of their eating Fish, especially those of the Shell-kind, whose Fibres are short, fit for Digestion and Nourishment, and consequently qualified for proving a Stimulus to Venery. Since 'tis obvious, that Shell-fishes do, from their own Bodies, separate the Matter of which their Shells are form'd, some have asserted, that they must also contribute to the Generation of Stones in the human Body: But, as this is a Piece of Speculation, which can only be determin'd by Experience, the Reader must consult the several Qualities of Shell-fishes under their respective Articles. The Antients imagined, that Shell-fishes increased and decreased with the Moon. Some of the Moderns have charged this Opinion with Falshood; but others have stood up in Defence of it. For the Reasons of this Phenomenon, the Reader may consult *Dr. Mead de Imperio Solis & Lunæ*. The Shells of these Animals, when reduced to a Powder, are, in Medicine, used on account of their drying, absorbent, correcting, and precipitating Qualities. The Virtues and Efficacy of the testaceous Powders, so much recommended by *Lister* for assisting the Concoction and Digestion of the Aliments, can only be understood of the calcined Shells; since, in consequence of the Calcination, they acquire a calcareous and septic Quality, by means of which they resolve and attenuate Crudities. The learned *Kramerus* observes, that the Shells of terrestrial Animals, when reduced to a Powder, are scarce fit for being mix'd with aqueous Vehicles, because they swim upon them, by reason of the large Quantity of the animal Glue they retain; so that they are a very improper Succedaneum to the Shells of Shell-fish.

**CONCHYLIA FOSSILIA.** These are what we call fossile Shells, concerning which there are so many different Conjectures, and so many disagreeing Hypotheses, that 'tis difficult to discover Truth. The Curious may, however, for their Satisfaction, consult *Morton*, *Palissy*, *Woodward*, *Dale*, *Ray*, and other Writers of Natural History. These are, by some, celebrated for their lithontriptic Virtues.

**CONCIDENTIA.** A Decrease of Bulk in the Whole, or any Part of the Body; or, the subsiding of a Tumor.

**CONCOAGULATIO.** The Coagulation, Concretion, or Crystallization of different Salts, first dissolved together in the same Fluid.

**CONCOCTIO.** This implies much the same as *COCTIO*, which see.

**CONCRETIO.** Concretion, in Chymistry, is the Condensation of any fluid Substance into a more solid Mass, importing the same as Coagulation.

In Surgery, Concretion is the growing together of any Parts, which ought, in the natural State, to be separate. Thus there is a Concretion of the Fingers with each other; of the Nares, Eyelids, Sides of the Vagina, and of many other Parts.

**CONCURSUS.** See *SYNDROME*.

**CONDENSATIO.** Condensation. It implies a Contraction of the cutaneous Pores by means of refrigerating, astringent, or drying Remedies: Or, it imports an Inspissation of any sort of Fluid, whether in or out of the Body. Hence, *Condensantia Medicamenta* are Medicines which condense or inspissate the Juices.

**CONDER,** Frankincense, or Olibanum. *Rulandus*.

**CONDIMENTUM.**

The *Condimentum* of the *Latins*, the *ἰδυσμα*, the *ἀρωμα*, and the *ῥώμασμα* of the *Greeks*, import whatever procures Sweetness, and a grateful Taste, to any Substance. Hence those Ointments are called *ἰδυσματα*, to which Aromatics are added, in order to give them a grateful Smell: But, in a more restrain'd Sense, that is called *Condimentum*, which is used in preparing Aliments, whether with an Intention of rendering them palatable, or assisting their Digestion. The Use of these Seasonings in Aliments is sufficiently obvious; for they are necessary, first, in Cases where a Weakness of the Viscera, and a Difficulty of Digestion, require that the concoctive Powers of the Stomach should be excited, that by this means the Body may be recruited by the Aliments used: Secondly, they are necessary when the Aliments to be taken are too hard to be easily brought to undergo that Change, which is absolutely necessary for the Nutrition of the Persons who take them: Thirdly, they are necessary in order to procure a grateful Taste to Aliments, otherwise ungrateful and disagreeable. In this last respect we must readily perceive, that the same Seasoning does not agree with every Palate, since some are fond of what is sweet, and others charm'd with what is bitter, whilst a third Class prefer an Acid to every other Taste. This particular Taste may be owing either to a congenial Idiosyncrasy, or Peculiarity of Constitution, or it may be acquired by Custom, or it may be the Result or Effect of some Disease. When, in a Weakness of the Viscera, Seasonings are requisite, 'tis the Business of the Physician to judge from what Cause this Weakness proceeds: If, for Instance, it proceeds from too great a Relaxation, stimulating Aromatics, and all those Medicines commonly call'd Corroboratives, are proper for removing it. If it proceeds from a quiet, sedentary, and idle Life, the digestive Powers are most effectually routed



by muscular Motion, and proper Exercise. If, on the contrary, this Weakness proceeds from Repletion, then Evacuants are principally beneficial; and, according to the Proverb which *Cicero*, in his Treatise *De Finibus*, Lib. 2. borrows from *Socrates*, *Hunger is the best Sauce*. For the other Disorders arising from the Intemperature of the peccant Juices, we are to choose such Correctors as are directly opposite to the particular Disorder. Thus, for Instance, Diseases arising from an alkaline Cause are to be removed by Substances of an acid and aqueous Nature; whereas those proceeding from an oleous, putrid, or rancid Cause, are to be subdued by Substances of an acescent and aqueous Quality. Where the Intention is to produce a speedy Change in hard, dry, and tenacious Aliments, then those Substances are proper, which dissolve what is tenacious, moisten what is dry, and soften what is hard. According to *Boerhaave*, in his *Institut. Medic. Sect. 54*. Salt, Vinegar, Aromatics, and oleous Substances, are the principal Materials of which Seasonings consist. *Diocles*, as the Ingredients of Seasonings, recommended Rue, Cumin, Coriander, Origanum, Savory, Thyme, Salt, Vinegar, Oil, Cheese, Silphium, and Sesamum. This is an Instance of the antient Greek Simplicity, before their Trade with *Alexandria* paved a Way for the Importation of foreign Aromatics. According to *Salmasius*, in his *Exercitat. Pliniana*, Salts were the most important of the dry Seasonings; whereas Vinegar and Oil were the principal among the liquid Kind, which were properly called *βάμματα*, and *ἐμβάμματα*; and, according to the different Substances with which they were mixed, *γαρίλαιον* and *ὀξύγαρον*. From what has been said 'tis obvious, that Seasonings are intended either to assist Nature, or gratify the Palate; tho' they are often perverted to the worst of Purposes, and used as Incentives to Gluttony. According to *Boerhaave*, Seasonings of the acid, saline, and aromatic Kind are hurtful to sound Constitutions by their noxious Acrimony, prove offensive to the capillary Vessels, and, by exciting a false Appetite by their Stimulus, load and oppress the Body, rather than nourish it. On the contrary, pinguious and oleous Substances, used too liberally, prove destructive of Health, by lubricating, relaxing, and debilitating the Solids. Upon the whole, the best Seasoning for Aliments is Hunger, whereas that most proper for Drink is Thirst.

CONDIRE signifies either to preserve with Sugar or Honey, or to pickle with Vinegar or Brine.

CONDITIO. The Condition, State, or Constitution of a Patient. *Paracelsus* speaks of *Condition* as relative to one Quality only, as Cold or Heat; whereas Complexion, or Temperament, according to him, consists in a Mixture of Qualities.

CONDITUM. The *Latins*, and lower *Greeks*, understood by *Conditum*, or *κονδίτον*, a Sort of Mulfum, that is, a Wine impregnated with Honey and Aromatics, especially Pepper, a Sort of Metheglin. *Meibomius* takes it for the *Claratum*, or *Vinum Hippocraticum*. But *Conditum*, in the modern Shops, imports what we call *Preserves*. The principal Uses of Preserves in Medicine are, to render nauseous Remedies more agreeable to the Palate, when mix'd therewith; or to take after disagreeable Physic, in order to remove the Remains of the Taste. But no great Dependence is had on their Medicinal Virtues. Some, however, are astringent, as that of Quinces; and others cooling, as that of Berberies; and, in general, their Virtues may be known by those of the Vegetable preserv'd.

As this Subject belongs more to the Province of Confectioners or Cooks than Physicians, I shall only add farther, what the College of Physicians have thought proper to direct, in the *London Dispensatory*, relative to *Preserves*.

PRESERVES of ROOTS, STALKS, PEELS, FLOWERS, FRUITS, and PULPS, as directed by the College.

Take of the Roots of Eryngo, any Quantity; let them be cleansed externally and internally, by taking out the Pith. Then steep them for a Day or too in clear Water, now-and-then shifted, and afterwards be rub'd dry with a clean Linen Cloth.

Afterwards take an equal Quantity of Sugar; dissolve it in a sufficient Quantity of Rose-water over the Fire, and scum it till it is almost of the Consistence of a Syrup; then put in the Roots, and continue it upon the Fire till all superfluous Humidity is evaporated, and it comes up to the Consistence of a Syrup.

The same way likewise are preserved the Roots of Angelica, Elecampane, Satyrion, the greater Comfrey, Ginger, and Zedoary.

The same way likewise are managed the Stalks of Angelica, and others, gathered before too long a Growth.

Take of the fresh Peels of Oranges, any Quantity; separate the outer yellow Peel, and, after three Days Maceration, at least, in Spring-water, frequently shifted, put them into Sugar, ordered and boiled as before, so that they may be made into a Preserve, according to Art.

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Conformably hereunto are managed the Peels of Citrons and Lemons.

Take of the Flowers of Citrons, as much as you please; and preserve them in Sugar, as above directed.

After the same Manner Orange-flowers are to be manag'd.

Take of as many Apricots as you please; pare them, take out their Stones, and put them into an equal Quantity of the finest Sugar.

After four Hours take them out again; and, boiling the Sugar without the Addition of any new Liquor, put them in, and simmer them together, according to Art.

After the same manner, or not much unlike it, are prepared the Fruits of Berberies, Cherries, wild Cherries, Citrons, Quinces, Peaches, common Apples, the five Kinds of Myrobalans, Walnuts, Nutmegs, Raisins, Pepper in Bunches from *India*, Garden and wild Plums, Pears, and Grapes.

The Pulps also are preserved of Berberies, of the solutive Cassia, or Fruit of the Pudding-pipe-tree, of Citrons, Quinces, Sloes, and others.

Take of Berberies, as much as you please; boil them in a sufficient Quantity of Spring-water, till they are tender; then pulp them thro' a Hair Sieve, with a Wooden Pestil made on purpose. Afterwards boil the Pulp in an Earthen Pan over a gentle Fire, stirring it frequently for fear of burning, till the watery Part is evaporated; and to six Pounds of such Pulp put ten Pounds of Sugar, and boil up together to a due Consistence.

There also are said to be preserved, or pickled, though with Brine and Vinegar, the Buds of Broom, Capers, Olives, and others.

Lastly, are also preserved the Bark of Cinnamon, the Flowers of Marygold, Almonds, Cloves, Pine and Pistachionuts, and others, as likewise Seeds and Buds; but these are managed in another manner, and, for the most part, incrustrated with Sugar dry; and therefore they are more properly call'd Candies, or Confections. *London Dispensatory*.

The *Diarydonium* is properly a Confection of Quinces, being the same as Marmalade. See CYDONIA.

CONDITURA. The same as *Condimentum*. It signifies also the same as BALSAMATIO, or the Embalming of dead Bodies, or any Parts thereof.

CONDRILLA. See CHONDRILLA.

CONDUCTIO, in *Caelius Aurelianus*, is a Spasm or Convulsion.

CONDUCTOR. A Chirurgical Instrument used in Lithotomy. See Tab. 49. Fig. 2, 3, and 4. It is call'd a Gorget. See LITHOTOMIA.

There are other Instruments call'd by this Name, which are used for directing the Knife in laying open Sinuses or Fistulas.

CONDURDUM. A Plant mention'd by *Pliny*, Lib. 26. Cap. 5. which he also calls *Herba Solstitialis flore rubro*. This, he informs us, if hung about the Neck, represses stumous Swellings. *Parkinson* takes it for the *Vaccaria*, which, in *Boerhaave's Index alt.* is call'd *Lychnis; segetum; rubra; foliis Persfoliatae*.

CONDYLOMA, *κονδύλωμα*, from its Resemblance to a *Condylus*, *κόνδυλος*, a Joint or Tubercle. It is a Tubercle, or callous Eminence, which arises in the Folds of the Anus, or rather a Swelling and Hardening of the Wrinkles of that Part. These Tumors frequently happen about the Orifices of the Uterus and other Parts. See ANUS.

CONDYLUS, *κόνδυλος*. A Condyle, that is, a Knot in any of the Joints, form'd by the Epiphysis of a Bone. In the Fingers it is call'd a Knuckle. In Botany it signifies the Joints of Plants.

CONEION, *κώνιον*. In *Hippocrates* it imports the *Cicuta*, Hemlock; but he only speaks of it as an external Remedy. It is said to be call'd by this Name from *κωνίον*, to turn round, because it produces a Vertigo in those who take it internally.

CONESSI. A Sort of Bark, of which I find the subsequent Account in the *Edinburgh Medical Essays*, in a Letter to Mr. *Monro*.

The Tree, of which I gave you some of the Bark as a Specific in Diarrhoeas, grows on the *Cormandel Coast* in the *East Indies*, where it is called *Conessi*, and is not unlike the *Cadogapala* of the *Hortus Malabaricus*. The *Conessi-seca*, or *Conessi* Bark of the small young Branches of the Tree which has least Moss, or external insipid Scurf on it, is to be chosen, and all that Scurf is to be scraped off.

The clean Bark, being pounded into a very fine Powder, is made into an Electuary with Syrup of Oranges, and taken to the Quantity of half a Dram or more, four times a Day, for three or four Days. The first Day it increases the Number and Quantity of the Stools, but without increasing the Gripes.



The second Day the Bark is taken, the Colour of the Stools is mended; and on the third or fourth Day their Consistence generally comes near to a natural State, when it succeeds at all.

In recent Diarrhoeas, arising from Irregularities in Diet, without a Fever, this Medicine seldom fails to make a Cure, if a Vomit of Inecacuanha is given immediately before the Patient begins the Use of the Bark. The same Management also is attended commonly with Success in Persons of a lax Habit of Body, who are troubled with an habitual Diarrhoea in moist rainy Weather, a remarkable Itching in the Skin being felt on the third or fourth Day. To such Patients, especially, the Electuary ought to be given Morning and Evening, for some time after they are seemingly cured. Their Drink should be Water wherein Rice hath been boiled; and sometimes Emulsions of the cold Seeds, with Sal Prunellæ, are necessary.

If there is a Fever with the Looseness, that must be remov'd by Bleedings and cool Emulsions, or the white Decoction with Sal Prunellæ, before the Concessi Bark is given.

Sometimes, when the Cause of a Diarrhoea, stop'd by this Medicine, lies beyond the intestinal Canal, the Patient, in a few Days after, complains of a Pain in the Right Hypochondrium, or in the Right Shoulder, or over the Stomach towards the Left Side, causing often a dull Sense of Pain, near or above the Left Clavicle, with a feverish Pulse. As soon as these Symptoms appear, the Patient must be blooded, and his Blood will be fizy, or with a tough yellowish Crust on the Top, when it has coagulated. The Quantity of Blood to be taken away, and the repeating the Venesection, must be determin'd by the Patient's Strength, the Degree of Fever, and Sharpness of his Pain. In such Cases, however, the Bleeding seldom removes the Pain entirely; but, after the Fever is brought sufficiently down by the Loss of Blood, I have seldom mis'd to complete the Cure, by giving Mercurius Dulcis, or rather Calomel, for some Days, in small Quantities, as an Alterative. I ought to observe, that the Bark should be fresh powder'd, and the Electuary new made, every Day, or second Day; otherwise the Bark loses its astringent, but grateful Bitterness on the Palate, and its proper Effects on the Intestines.

**CONFECTA.** Comfits, or Sugar-plums; Seeds, or other Substances, incrustrated with Sugar. These are sometimes impregnated with cathartic Ingredients, as a Temptation to froward Children. See **CONFECTIO**.

**CONFECTIO.** A Confection, in general, signifies any thing prepared with Sugar. See *Hedelius's Pharmacina acroamatica*. In particular, it imports the same as **CONDITUM**, "something preserved," especially dry Substances; and is otherwise call'd *Confectio solida*, "a solid Confection." This is either *simple* or *compound*, call'd also *Medicinal*: Solid, saccharine, *simple* Confections, as we are taught by *Zwelfer*, in his *Pharmacopœia Regia*, are prepared after the following Manner:

The Sugar, being first well clarify'd with pure Water, and the White of an Egg, is boil'd to a Consistence a little thicker than that of a Syrup. Then the Thing which is to be preserv'd, or incrustrated with Sugar, for Instance, Cinnamon, Almonds, Aniseeds, and the like, are put into a large Copper-vessel, flat-bottom'd, not deep, which is plac'd upon a very gentle Fire, and when it is moderately heated, together with its Contents, the Artist sprinkles some of the liquid Sugar, before prepar'd, somewhat warm, upon the Things in the Vessel, just enough to moisten them, and immediately stirs them to and fro, shakes them, rubs them in his Hands, and tosses the Vessel after an artificial manner, in order to prevent the Seeds, or whatever else it be, from clustering or sticking together. Then they are to be totally dried by a gentle Coal Fire under the Vessel. After this as much dissolv'd Sugar is to be added to the Thing as is sufficient to moisten it moderately, and, continuing the Agitation, Commotion, and Rubbing with the Hands, it is to be dry'd. This Operation is to be repeated, moistening and drying the Materials by turns, till they are sufficiently covered with Sugar.

This is the Method of preparing Confections with pure Sugar, without any Adulteration; but, that Confectioners may prepare them with greater Ease, and be able to sell them at a lower Rate, they add Starch to the dissolv'd Sugar, with which they moisten them; by which means they not only dry them sooner, but also render them sufficiently large, at a less Expence than otherwise they could do. *Helmont*, without Exception, condemns all the Confections of the Shops, not only as insignificant and trifling, but also pernicious and hurtful Medicines. *Rittmuller* declares himself of the same Opinion, and affirms, that Confections are prejudicial to most Patients, especially those labouring under hypochondriacal Disorders. The Word *Confection* also signifies a liquid or soft Electuary.

There are various Sorts of Confections directed in *Dispensatories*; but those ordered in the *London Dispensatory* are the following.

**CONFECTIO ALCHERMES.** See **ALKERMES**.

**CONFECTIO ARCHIGENIS.**

*The CONFECTIO of ARCHIGENES.*

Take of the best Castor, of long and black Pepper, Styraç, Spikenard, Costus, Galbanum, and Opium, of each half an Ounce; of Saffron, two Drams; of Syrup of Mugwort, a sufficient Quantity to make the Whole into a Confection.

This hath not been received into any *Dispensatory* of the College before the last Reformation of it. It is originally a Prescription of *Mesue, de Tussi Humida*, and is in pag. 30. of the *Venice* Edition in 1549. It is from thence inserted into the *Augustan Dispensatory*, exactly as it stands here, unless in the Substitution of the Syrup of Mugwort for Honey; and is there recommended for Distempers of the Breast, as also in nervous Disorders; and these Intentions it seems very well accommodated to. *Zwelfer*, in his Animadversions upon it, says, great Care is to be taken in its Composition, notwithstanding it consists but of few Ingredients; but it seems to require no other Skill than is required in the Composition of the Capitals, that is, dissolving and straining the Gums and Opium, so as to incorporate them with the Syrup, and then to sift and stir in the rest of the Ingredients, finely powder'd, together. Its Dose is from one Scruple to one Dram, to be repeated as Occasion requires.

**CONFECTIO FRACASTORII.** See **DIASCORDIUM**.

**CONFECTIO HAMECH.**

*The CONFECTIO of HAMECH.*

Take of the Barks of yellow Myrobalans, two Ounces; of the Chebulan and black Myrobalans, of Violets, Pulp of Colocynth, and Polypody of the Oak, of each one Ounce and a half; of Wormwood and Thyme, of each half an Ounce; of the Seeds of Anise and Fennel, and of red Roses, of each three Drams. Bruise all these, and macerate them together for a whole Day in six Pounds of Whey; then boil to half its Consumption, and to the strain'd Liquor, after it has been pressed out, add of the Juices of Fumitory, of the Pulps of Prunes and Raisins, of each half a Pound; of white Sugar, and clarify'd Honey, of each one Pound. Boil these to the Consistence of Honey; sprinkling in, at the latter End, powder'd, of the Troches of Agaric, and the Leaves of Sena, of each two Ounces; of Rhubarb, one Ounce and a half; of Epithymum, one Ounce; of Diagyridium, six Drams; of Cinnamon; half an Ounce; of Ginger, two Drams; of the Seeds of Fumitory and Anise, and of Spikenard, of each one Dram; and make them all together into a Confection. S. A.

This is a very antient *Arabian* Composition, and first prescrib'd by *Mesue*, tho' since alter'd by *Fernelius*. It is continu'd here much the same as in the *Augustan Dispensatory*, and as it was first receiv'd by the College: But it is so nauseous as seldom to be prescrib'd but in Glysters, and not often in that manner, so that the Shops have of late not been much accusom'd to make it.

In every Ounce of this Confection are contain'd seven Grains and a half of Diagyridium, a Scruple of Sena and Agaric, half a Scruple of Epithymum, and the Decoction of fifteen Grains of Colocynth.

**CONFECTIO RALEIGHANA:** *Sir Walter Raleigh's Confection.*

Take of the Shavings of Hartshorn, one Pound; of Vipers Flesh, with their Hearts and Livers, six Ounces; of the Flowers of Borrage, Rosemary, Marygolds, Sun-dew, red Roses, and Elder, of each half a Pound; of the Leaves of Scordium, Carduus Benedictus, Baum, *Cretic* Dittany, Mint, Marjoram, Betony, of each twelve Handfuls; of the Juice of Kermes, of the greater Cardamom-seeds, and Cubebs, of Juniper-berries, Mace, Nutmegs, Cloves, and Saffron, of each two Ounces; of the best Cinnamon, Sassafras-bark, and the yellow Peel of Citrons and Oranges, of each three Ounces; of Aloes-wood, and Sassafras-wood, of each six Ounces; of the Roots of Angelica, wild Valerian, Fraxinella, or white Dittany, *Virginia* Snake-root, Zedoary, Tormentil, Bistort, long and round Birthwort, Gentian, and Masterwort, of each one Ounce and a half. After these are all cut, and grossly bruised, put them into a proper Vessel, to draw out their Tincture, with rectified Spirit of Wine, according to Art. Filtre this Tincture, and evaporate it into an Extract by Distillation in *Bathes Mariæ*. Let the Magma, which is press'd out, be burnt, and a Lixivium made of its Ashes, so as to procure from it a pure Salt, according to Art, which must be added to the aforesaid Extract; and afterwards, to this Mixture, stir in the following Ingredients, according to Art.

Take



Take of Oriental and Occidental Bezoar, of each half an Ounce; of Oriental Pearls, two Ounces; of red Coral, three Ounces; of Oriental Bole, true seal'd Earth, and calcined Hartshorn, of each one Ounce; of Ambergrise, one Ounce; of Oriental Musk, a Dram and a half; of white Sugar-candy powder'd, two Pounds: And make into a Confection, according to Art.

This hath not been in any *Dispensatory*, that I know of, before, except that of *Bates*. It hath obtain'd a great Name and Esteem amongst some Persons, which seems to have been the Reason why the College have now made it an officinal Medicine. The whole Process is long and troublesome; but the greatest Care incumbent upon the Compounder is, that the Extract be, at first, left thin enough to receive the Powders, which are afterwards to be mix'd with it, so that the Whole may be of a due Consistence. However this Medicine may stand in the Opinion of many, it hath now much more Honour done it than it deserves, all its main Intentions being much better answerable with less Trouble.

#### CONFECTIO DE SANTALIS: *Confection of Saunders.*

Take of each sort of Saunders, one Ounce; of red Coral, Armenian Bole, and seal'd Earth, of each half an Ounce; of Kermes-berries, Tormentil-root, Dittany, Saffron, Myrrh, red Roses exungulated, and burnt Hartshorn, of each three Drams: And make them into an Electuary, with Syrup of Cloves.

This was an Addition to the last *College Dispensatory*, and seems to have been design'd for an Astringent.

#### CONFECTIO DE THURE: *Confection of Frankincense.*

Take of prepared Coriander-seeds, half an Ounce; of Nutmegs, and the whitest Frankincense, of each three Drams; of Liquorice and Mastich, of each two Drams; of Cubebs, and prepared Hartshorn, of each one Dram; of Conserve of red Roses, one Ounce; of the whitest Sugar, a sufficient Quantity, to make them into little Balls or Lozenges.

CONFERENS. The same as SYMPHERON, which see.

CONFERTUS. The same as ἀθετός. See ATHROOS.

CONFERVA. A sort of barren Moss, destitute of florid Heads, and even of those Knobs or Tubercles, which some Mosses are furnish'd with, instead thereof. It consists entirely of mere slender and uniform Leaves or Stalks, divided into very slender Capillaments. The Conservæ are divided, in the last Edition of *Ray's Synopsis*, first, into simple, which are those whose Leaves or Stalks are equable or smooth; secondly, geniculated, or those which are intersected with Rings, like those of a Worm; thirdly, nodose, or knotted, which are those which have frequent Knots or Tubercles along their Leaves or Stalks.

CONFIRMANTIA MEDICAMENTA. Medicines which restore or confirm the Strength of the Body, or any Part of it; or, Medicines which fasten the Teeth in their Sockets.

CONFLUENTIA. A Term, used by *Paracelsus*, to express the Agreement, Junction, or Confederation of the Microcosm with the Stars; or of a Disease with Remedies.

CONFEDERATIO, in *Paracelsus*, implies the same as CONFLUENTIA.

CONFORMATIO, Conformation. Some Diseases are call'd *Morbi malæ Conformationis*, or organical Diseases; that is, which depend upon the ill Conformation of the Parts. These, if external, may admit of a surgical Cure; and proper Exercise, Regimen, and Medicines, may sometimes contribute much to the Relief even of those which are internal, or, at least, may render them supportable.

CONFORTANTIA MEDICAMENTA. Comforting Medicines. The same as Cardiacs, or Cordials. See CARDIACA.

CONFORTATIVA. The same as CONFORTANTIA.

CONFRICATIO, in Pharmacy, signifies the reducing any easily friable Substance to Powder, by rubbing it with the Hands, as Starch, for Instance: Or, it implies the Rubbing any soft and succulent Vegetable with the Hands, in order to express out the Juice.

CONFRICATRICES. The same as TRIBADES, which see.

CONFUSÆ FEBRES. Certain Fevers, which, perhaps, never existed, except in the Imagination of *Bellini*. These, according to him, are more Fevers than one affecting a Person at the same time, beginning and ending together, and so confus'd together, as scarcely to be distinguishable from each other.

CONFUSANEUS PANIS. The same as ἀγύστος ἀντοπνεύ-

της, or ἀντοπνεύς. Bread made of Meal, from which the Bran has not been separated. See AKROS.

CONFUSIO. A Disorder of the Eyes, which happens, when, upon a Rupture of the internal Membranes, which include the Humours, they are all confounded together.

CONGELATI, or CONGELATICI. Persons affected with a *Catalepsis* are sometimes call'd by this Name.

CONGELATIO. Congelation is such a Change, produced by Cold, in a fluid Body, that it quits its former State, and becomes consistent or condensed. When the Cold is lessen'd, and reduced to the Degree in which it subsisted before the Concretion, the Body congeal'd again resumes its fluid State. Thus *Conglaciation* is, when a liquid Substance is converted into that Species of hard and consistent Body, which we call Ice. We must here observe, that the Word *Congelation* is only apply'd to homogeneous Fluids, such as Water, Oils, or pinguious Substances, and fused Metals, in which, besides a Concretion in the cold Air, no Change is observed. We must also observe, that, by *Congelation*, some Bodies, such as Water, are rarefied or expanded; whereas others are condensed, or render'd more compact, such as fix'd Metals, and pinguious Bodies. In the Shops the Condensation of any Liquor, in a cold Place, is also call'd *Congelation*. The Stones produced in some Caverns, from the Drops of a petrifying Water, are also call'd *Congelations*. For one Method, in which Nature forms Stones, is, by such a Congelation as does not suffer any thing of an earthy Nature to be separated or precipitated from the whole Mass, either spontaneously, or by the Action of Fire; but produces uniform Dryness, and Induration of the whole Mass.

CONGELATIVA MEDICAMENTA, are Medicines which stop Fluxions, inspissate, and dry. *Rulandus*.

CONGER, or CONGRUS. The Conger Eel. A very large Sea Eel, commonly call'd a Sea-serpent. *Galen* says, the Flesh is hard, and of difficult Digestion. It is esteem'd a very ordinary Food.

CONGESTIO. Congestion, or Collection. Some Authors, distinguishing Congestion from Collection, say, that a Collection of Humours is made on a sudden; whereas a Congestion is form'd gradually.

#### CONGIUS.

This Species of Measure, used among the Antients, is generally determined to be the same with the *Chus* or *Chon* of the *Athenians*, which contains ten Pints of Wine, and nine of Oil. In *Lemery's Pharmacopœe universelle*, it is distinguish'd from the *Choa*, and said to contain ten Pints of Wine, or nine of Oil; whereas the *Choa* contains eight Pints of Wine, and seven and a Quarter of Oil. But *Lemery* is in an Error, when he affirms, that this *Congius* is a Measure of the *Athenians*; for the *Congius* or *Chus*, in use among them, weigh'd nine Pounds, and that among the *Romans* ten. *Peireskius* determines, that the *Roman Congius* was half a cubic Foot in Dimensions, and contain'd about three *Paris* Pints. In the *Cabinet de la Bibliothèque de St. Genevieve*, and in *Fernellii universa Medicina*, it is asserted, that it is equal to three *Paris* Pints. The *Roman Congius* is the eighth Part of an Amphora, that is, it contains ten *Roman* Pints of Wine; and its Capacity was equivalent to 168½ cubical *Parisian* Inches; so that two *Congii* are almost equal to seven *Paris* Pints, or three *Strasbourg* Measures and an half; and three *Congii* are nearly equivalent to ten *Paris* Pints and an half, or five *Strasbourg* Measures and a Quarter. According to *Beverinus*, the *Roman Congius* was the eighth Part of an Amphora, contain'd six Sextarii, and 120 Ounces of Wine and Water, but only 90 of Corn.

*Salmasius*, in his *Exercitatio*. *Plinian*, endeavours to prove, that a *Congius* contain'd ten Pounds of Wine or Water, but only nine of Oil. In the *London* and *Edinburgh Dispensatories* eight Pints make the *Congius*. The Measure containing two *Congii* was call'd *Bicongius*, and that containing three *Tricongius*. From the *Congius* came the *Congiarium*, a kind of Gift or Largess, publicly distributed to the People by the Emperors. This Name it probably received from its being at first distributed in *Congii*.

CONGLACIATIO. The same as COAGULATIO, or CONGELATIO, which see.

#### CONGLOBATA GLANDULA.

A conglobate Gland. Modern Anatomists have reduced all the Glands of the Body to two Sorts, that is, the *Conglobate Glands*, and the *Conglomerate Glands*.

A conglobate Gland is a little smooth Body, wrapt up in a fine Skin, by which it is separated from all other Parts, only admitting an Artery and Nerve to pass in, and giving way to a Vein and excretory Canal to come out. Of this Sort are the Glands of the Brain, and the Testes. *Keill's Anatomy*.

Under the Title of *Conglobate Glands*, *Winflow* includes the lymphatic Glands alone; and he calls all the other Glands of the Body by the Name of *Conglomerate*.

CONGLOMERATA GLANDULA. A conglomerate Gland.



A conglomerate Gland is composed of many little conglomerate Glands, all tied together, and wrapt up in one common Tunicle or Membrane. Sometimes all their excretory Ducts unite, and make one common Pipe, thro' which the Liquor of all of them runs, as the Pancreas and the Parotides do. Sometimes the Ducts, uniting, form several Pipes, which only communicate with one another by cross Canals, and such are the Mammæ. Others, again, have several Pipes, without any Communication with one another, of which Sort are the Glandulæ Lachrynales, and Prostatae. And a fourth Sort is, when each little Gland has its own excretory Duct, thro' which it transmits its Liquor to a common Basin, as the Kidneys. *Keill's Anatomy.*

**CONGLUTINANTIA.** Conglutinating; that is, healing Medicines.

**CONGRUS.** See **CONGER.**

**CONIA,** *κονία.* Lime. It imports also, when join'd with *σακτιν*, a Lixivium, or Lye, of vegetable Ashes. Hence, in *Hippocrates*, *κονιάδεια ἕξ* are high-colour'd Urines, resembling a Lixivium.

**CONIA,** *κονία.* This is the *πρωίτης δίνος*, Wine impregnated with the Picea, or Fir. *Dioscorides*, *L. 5. C. 48.* gives the Method of making this Wine; which is, by pouring Must upon liquid Pitch, and letting it ferment upon it, previously washing the Pitch with Brine, or Sea-water. *Galen*, in his *Exegesis*, gives a short, but obscure, Description of this Wine. According to him, it is Wine impregnated with the *πρωίτης*, which is the Picea, or Tæda, which must be infused in the Wine, without taking off the Bark.

**CONIFERÆ ARBORES.** Coniferous Trees are such as bear Cones; as the Cedar of *Lebanon*, Fir, and Pine. *Miller's Dictionary*, *Vol. 1.*

**CONILE,** from its Similitude to *κόνιον*, Hemlock, is the MYRRHIS, which see. But, I believe, this is not the Plant which *Oribasius* calls by this Name, and which he represents as a brisk Cathartic.

**CONIS,** *κόνις*, Dust, or fine Powder, or Ashes. It signifies also a Nit, or Scurf on the Head; and sometimes Lime.

**CONISTERIUM,** *κονιστήριον.* The same as **ΑΠΟΔΥΤΕΡΙUM**, which see. It signifies also the Ash-hole of a chymical Furnace.

**CONJUNCTA CAUSA.** The conjunct or immediate Cause of a Disease. See the **PREFACE.**

**CONJUNCTA SIGNA** are the pathognomonic Signs of a Distemper.

**CONJUNCTIVA TUNICA.** See **ADNATA.**

**CONNA.** A Name for the *Cassia Fistula.*

**CONOCARPODENDRON,** *κονοκαρπόδενδρον.* The Name of a Tree, which is a Native of the Country of the *Hottentots*, near the Cape of *Good Hope*.

The Characters are,

It hath an apetalous stameneous Flower, which is surrounded by a Number of long Leaves, immediately under the Flower-cup, which consists of five narrow Leaves: These are succeeded by Cones, in Shape like those of the Larch-tree. The Seeds are each of them included in a separate Cell. *Miller's Dictionary*, *Vol. 2.*

*Boerhaave* mentions ten Species of this.

1. *Conocarpodendron*; foliis argenteis; sericeis, latissimis. SILVER-TREE, WITH BROAD SOFT WHITE LEAVES.

2. *Conocarpodendron*; folio crasso, nervoso, lanuginoso, supra crenato, ibique limbo rubro; flore aureo; cono facile deciduo.

3. *Conocarpodendron*; folio rigido, crasso, angusto; cono Laricis parvo. SILVER-TREE, WITH A NARROW THICK STIFF LEAF, AND A SMALL CONE.

4. *Conocarpodendron*; folio rigido, angusto, apice tridentato, rubro; flore aureo.

5. *Conocarpodendron*; folio subrotundo, crasso, rigido, valde nervoso; cono longo, variegato, ex rubro & flavo; flore aureo. SILVER-TREE WITH A ROUNDISH THICK STIFF LEAF FULL OF NERVES, LONG CONES VARIEGATED WITH RED AND YELLOW, AND A GOLD-COLOUR'D FLOWER.

6. *Conocarpodendron*; folio angusto, rigido, breviori; cono parvo, aureo, coronâ foliaceâ succincto.

7. *Conocarpodendron*; acaulon, folio rigido, nervoso, oblongo, latiori; cono fusco; semine oblongo, in medio quasi excavato.

8. *Conocarpodendron*; foliis subrotundis, brevissimis; capituli immaturi, globosi, parte inferiori fusca, mediâ aureâ, supremâ viridi.

9. *Conocarpodendron*; folio tenuissimo, angustissimo, saligno; cono caliculato.

10. *Conocarpodendron*; folio tenui, angusto, saligno; cono caliculato, coronâ foliaceâ succincto. SILVER-TREE WITH A NARROW WILLOW-LEAF, AND THE CONES GROWING IN SMALL CUPS, WHICH ARE SUR-

ROUNDED WITH A CROWN OF LEAVES. *Boerb. Ind. alt. Vol. 2.*

**CONOIDES CORPUS,** *κονοειδὲς σῶμα.* The *Glandula Pinealis.* See **CIBREBRUM.**

**CONOPS,** *κόνωψ.* A Gnat. *Hippocrates* mentions Efflorescences on the Skin like the Bites of Gnats, as appearing in certain epidemical Distempers, which he describes.

**CONQUASSATIO.** *Conquassatio*, is a Species of Conminution, or a particular Operation, by which moist concreted Substances, such as recent Vegetables, their Fruits, lælescent Seeds, and the softer Parts of Animals, are sometimes in a Marble, sometimes in a Glass, sometimes in an Earthen, and sometimes in a Metalline Mortar, confused and agitated with a Pestil, either of Metal, Wood, or Stone, till partly, by their proper Succulence, or an Affusion of some Liquor, they are reduced to a soft and fine Pulp. Metalline Instruments are not to be used for this Purpose; because not only the manifest, but also the latent Salts of the Substances, subjected to this Operation, acting upon these Instruments, may derive an adventitious and virulent Quality from them, which will not only render such Substances unfit for the intended Purposes, but also nauseous and hurtful, when exhibited as Medicines.

**CONSENSUS.** Consent. The same as **SYMPATHIA**, which see.

**CONSERVA.** A Conserve is a Medicine of the Consistence of a Pulp, or an Electuary prepared of Flowers, Herbs, their tender Tops, rarely their Roots, and more rarely the Pulps of Fruits, cut into small Pieces, confused, and intimately mixed by beating them in a Mortar, especially of Stone, with a wooden Pestil. Refin'd Sugar, or loaf Sugar, are generally used for preparing Medicines of this Kind, unless we have a mind to substitute in their room white powder Sugar; which answers the End very well, since it is sometimes entirely divested of that Calx, by which the loaf Sugar is form'd into Pyramids, by which means it acquires a certain innocent Acrimony, according to *Wedelius*. The Proportion of Sugar is generally double to the Substance to be made into a Conserve; but sometimes more, and sometimes less, is used. In the *London Dispensatory*, triple the Weight of Sugar is prescrib'd: but some, who go more accurately and distinctly to work, inform us, that for moist Substances, double the Weight of Sugar is sufficient; and that the Pulps of some Fruits, such as that of the Dog-hip, require still a somewhat smaller Quantity; but Substances of a drier Nature require more than double the Quantity of Sugar, adding at the same time a little of some distil'd Water, that they may be the more commodiously mix'd with the Pestil. In the *Edinburgh Dispensatory*, triple the Quantity of Sugar is prescribed for making dry Substances into Conserves.

According to *Zweiser*, in his *Pharmacop. Reg.* "In dry Substances an equal Weight of Sugar is sufficient: but in succulent and mucilaginous Herbs and Flowers, a Pound and an half of Sugar is requisite for one Pound of the Herbs or Flowers; lest too large a Quantity of the Sugar should increase the Price, in large the Dose, create a Nausea, destroy the Digestion by its preternatural Ferment, which, in clarifying, it received either from the Quick-lime, or the Clay of the Moulds; or, lastly, lest it should blunt or weaken the Force of the Medicine, or produce any other unlucky Effect. We must, with *Wedelius*, observe, that different Plants require different Quantities of Sugar. Hence, in order to prevent Mouldiness, the softer and more succulent the Plant is, the larger Quantity of Sugar is to be used, and *vice versa*. Plants which are too moist, ought previously to be dried a little in a Shade. The more Sugar is used, the softer the Conserve produced will be. For making any highly succulent or mucilaginous Plant into a Conserve, Sugar boil'd to a thick Consistence is sometimes used. Some, for making Conserves, use Honey instead of Sugar, as we may see in the *Atrium Medicinæ Helveticorum Constantini de Rebecque*. Some prepare Conserves by laying Flowers and Sugar *stratum super stratum*, and exposing them in this State to the Sun. Others make a Julap, which they mix up with the Substance of which the Conserve is to be made. Some boil the Substances, of which the Conserve is to be made, as the Roots of Marshmallows or Comfrey, in Water, till they become soft; then they pound them, or even pass them through a Sierce, and add a sufficient Quantity of Sugar. The Pulps of Fruits also, when bruised, are to be passed through a Sierce; then adding a sufficient Quantity of Sugar, they are to be mixed up to a due Consistence. New-made Conserves are generally exposed to the Sun for some Days, and agitated now-and-then, that they may be the more effectually mix'd. But we must take care, lest they should ferment, and run over the Vessel, which generally happens to the Conserves of the Flowers of Borrage and Buglois. This Mixture is best prevented by not filling the Vessel full. Conserves are best preserved in glaz'd Earthen Vessels, or in Glass Vessels: They may be easily prepared of recent Herbs and Flowers; but they may also be had at any Season; if, for Instance,



stance, the dried Flowers, reduced to a Powder, and form'd in a Mass, with the distil'd Water of these Flowers, are mix'd with Sugar dissolv'd in the like Water. Thus liquid Conservees are prepared; whereas such as are solid, are made by mixing the dried Flowers, reduced to a Powder, with Sugar dissolved in the Water of the same Flowers. We must also observe, that, according to *Hoffman*, in his *Dissertat. de Natura Sacchari*, the most elegant and effectual Conservees are made by evaporating the Juice of any Vegetable, or by using its tender Flowers, Leaves, and distil'd Oil. *Conservees* are the Invention of the *Arabians*, in order to preserve Vegetables, when their Virtues are lost by being dried. The principal Use of Conservees is; together with Preserves and Syrups, to be a Vehicle for Powders, in order to make Boluses and Electuaries. But they are in a particular manner useful, where the Virtue of the Vegetable, reduced to a Conserve, is wanted to mix slowly with the Mass of Blood. For this Reason they are recommended for strengthening the Viscera in arthritic Disorders.

Directions given by the *College Dispensatory*, for Conservees, are these: The Conservees of Wormwood, Sorrel; of Orange, Borrage, and Clove-flowers; of Scurvygrafs-leaves; of the greater Comfrey-flowers; of Hips; of Fumatory; of the Flowers of Lavender; Lilies of the Valley, Mallows, and Tops of Marjoram; of the Leaves of Mint; of the Flowers of Damask, Red, and Dog-roses; of Rosemary-flowers; of the Leaves of Rue, of Elder and Violet-flowers; of the yellow Rind of Oranges; of Lemon-peel; of Sloes, and of Berberies; are all made with a triple Proportion of Sugar. But it is to be observed, that they are not all to be mix'd in the same manner.

Some require to be cut, bruised, and gently boiled; and some require neither cutting, nor bruising, nor boiling; and some again require or forbid only some of these Preparations. But this Caution is sufficient to prevent any Error in a skilful Compounder. *London Dispensatory*.

*Quincy*, in his *Pharmaceutical Praelections*, informs us, that the Galenical Pharmacy furnishes us with several Medicines preserved by Sugar or Honey, under the Titles of Syrups, Honeys, Oxy-mels, Juices, Candies, Confections, and Conservees; all which Forms differ in little else than the Management, whereby their respective Materials are joined with Sugar or Honey; and all of these seem contrived either to preserve certain Things, as near as possible, to the Condition in which Nature affords them, or else to render them more palatable in taking.

In order to judge what Dependence may be had upon these Things, in any Intention, which may occur in extemporaneous Practice, we must examine the Fitness of the Parts of the *Materia Medica* to be so mix'd; to which Purpose we are to consider, what it is which the Sugar or Honey does.

In this View, the Materials, thus ordered, may be consider'd either in their whole Substance, with which the Sugar is immediately mix'd, as in the Conservees; or else in their Juices or Decoctions, which are afterwards boiled up with Sugar or Honey into Syrup. And, in such a Review of them, we are to have a great Regard to that particular Quality in the Simples, in which their medicinal Virtue consists, as it is, or is not, capable of Preservation by this Means; and to its Quantity of Efficacy or Power of Operation, to see whether, after this manner, we can have enough of it in a convenient Dose, to depend upon, as a Medicine, in Cases of Moment.

Of Things which are immediately mixed in Substance with Sugar, those only seem fitted for it, whose predominant Qualities are thus to be preserved, and thus to be given as a Medicine, from which somewhat may be expected to be done. Thus the Flowers of Lavender, Rosemary, the outer Peels of Oranges and Lemons, and a few more of those ordered in Conservees, are preservable with Sugar, in such a manner, that small Quantities of them will answer in such Intentions as they are suited to answer in any other Form. But Mint, Scurvygrafs, Rue, and such Things as require to be taken in large Quantities before we can lay any Stress upon them, are very unfit for this Treatment; because a Dose, sufficient to be trusted to, is enough to nauseate the Stomach, and do Mischief otherwise, by the Sugar they necessarily carry along with them. All Bitters are likewise unfit for this Management, as Wormwood, Fumatory, and the like, because they are too nauseous to be endured; and those of a glutinous and viscid Texture, as the Comfrey, and others, by lying in Sugar, lose that very Quality which ought to be expected, and soon become good for nothing. The same Rule of judging holds likewise in all other Forms where Sugar comes in; so that, on Examination, we shall find few of the Alterants improveable by this means; though, as to Emetics and Cathartics, where a sufficient Efficacy for a Dose lies in a little Room, they are conveniently enough thus preserved. And, indeed, if we consider a Conserve, or a Syrup, as a means to join other Things of Efficacy together, and to give to other Forms Consistence, and a Convenience of taking, thus may most of them have their Use; but little else can be said in their Favour.

The Conservees make a considerable Article in the Furniture of an Apothecary's Shop; but, although they are now much abridg'd by the College, they have retained more than are ever prescrib'd or made, either from their Nauseousness, or Unfitness for this Form. Of those Things which require to be gently boil'd, are only the Sloes and Barberries, because, without it, their Pulps are so thin as not to afford a due Consistence with Sugar; but much Boiling is here to be avoided. All other Conservees require nothing more than barely beating them, in a Mortar, to a sufficient Fineness; but the Labour required to do this makes most of them, at best, so coarse, that they ought to be pulp'd before they are reduced into Electuaries: Their Aptness to candy likewise subjects them to the same Necessity.

There is a very considerable Oversight in the List of Simples reducible into Conservees, as it is printed in the last *Dispensatory*, both in relation to the Method in which they stand, and the Distinction of the Things themselves; which it may be necessary to take some Notice of here, to prevent being led into Mistakes thereby. The Distinctions of *Summitates*, *Flores*, *Folia*, and *Fruetus*, are not only intermix'd, and consequently repeated oftener than a good Method requires; but also Things are placed under these Distinctions, which do not belong to them. Thus, under *Summitates*, are Lavender, and Lilies of the Valley, the fine prick'd Flowers of which only are used in Conservees. Under the *Folia*, likewise, are Violets, which are used only in Flowers, and Elder, the Leaves of which were never yet made into a Conserve. The Sloes and Barberries, which stand here, belong to the Distinction of Fruits, and should be placed with the Hips. There are other Inadvertences not of much Consequence, and which every Reader can easily rectify. *Quincy's Praelect. Pharmac.*

CONSERVATIO, in Pharmacy, is Preserving, Pickling, or keeping any thing from Putrefaction or Evaporation, by the Addition of some other Substance.

CONSERVATIVA MEDICINA. That Part of Medicine which relates to the Preservation of Health.

CONSILIGO. The *Helleborastrum*, Setterwort. See *Helleborus*; *niger*; *fetidus*.

CONSILIUM. The Advice given by one or more Physicians, relative to the State of the Patient, and the Method of Cure proper to be pursued.

CONSISTENTIA. When used relative to a Disease, it imports the State or Acme thereof. When apply'd to the Humours, Excrements, or Excretions, it imports their Consistence.

CONSISTENTIA, Consistence. This Word relates to the Thickness or Thinness of Medicines. What the particular Consistence of each Class of Medicines is, will be taken notice of under its respective Article. Only we must here observe, with *Jacobus Sylvius*, that not only the Gratefulness, but also the Operation of Medicines depend, in some measure, upon their Consistence; for Medicines of a thick Consistence are taken into the Stomach, and penetrate into the Body, with greater Difficulty, than such as are thin and liquid; and it requires more Trouble to swallow a thick than a thin Medicine: For this Reason thick Medicines are generally nauseous and ungrateful; and this is the Reason why cathartic Boluses are often dissolved in some agreeable Liquor, since, in this Form, they are more grateful than in any other: For this Reason, also, Apozems are generally clarified by the Whites of Eggs, or a Strainer. Thus, Honey is diluted with Water, that it may the more easily enter the obstructed Pores of the Skin, and operate as a Detergent. For this same Reason a large Quantity of warm Water is more effectual in exciting a Vomiting, than a smaller Quantity. On the contrary, a thick Consistence is, on some Occasions, more to be desired; in Ulcers, for Instance, of the *Aspera Arteria* and *Oesophagus*, where we must give Medicines made up with Gum Tragacanth, or other Substances of a like Nature, which, by their Viscidity, fix the Medicines, as it were, longer to the Part affected: Hence it happens, that, in Medicines to be inspissated, some Things are added, which neither add to nor impair their Operation, but only have a Respect to their Consistence; such as Wax, for Instance, in Ointments and Plaisters.

CONSOLIDA. A Name apply'd to many different Plants. Thus the *Consolida major* is the *SYMPHYTUM*; the *Consolida media* is the *BUGULA*; the *Consolida minima* is the *BELLIS MINOR*; the *Consolida Regalis* is the *DELPHINIUM*; and the *Consolida Sarcenica* is the *DORIA*; *quaer Jacobaea*; *Alpina*; *foliis longioribus, serratis*. See *DORIA*.

CONSOLIDANTIA, or CONSOLIDATIVA MEDICAMENTA. These are Medicines calculated for promoting the Cure of Wounds, by removing the several Impediments to their Consolidation or Conglutination.

CONSPERSIO. The same as CATAPASMA, which see.

CONSTANS. When apply'd to the Strength, or vital Powers, it imports Firmness, or a good Condition.



**CONSTELLATUM UNGUENTUM** is an Ointment made of Earth-worms, cleansed, dried, and powder'd, and made into an Ointment, with the Fat of Boars or Bears. It is esteem'd good for the Tooth-ach, and for healing Wounds.

**CONSTIPATIO.** The same as **ADSTRICATIO**, which see.

**CONSTITUENS.** This is no more than that Substance which gives a due Consistence to compound Medicines, such as Rob, Honey, or Syrups, in Electuaries; or Wax, and other tenacious Substances, in Plaisters.

**CONSTITUTIO.** The same as **CATASTASIS**, which see.

**CONSTRICATIO.** The same as **ADSTRICATIO**.

**CONSTRICTIVA,** Stryptics.

**CONSTRICTORES MUSCULI.** Muscles which shut up or close some of the Orifices of the Body, are call'd by this Name. Thus there is the *Constrictor Palpebrarum*, otherwise call'd *Orbicularis Palpebrarum*: The *Constrictor Labiorum*: The *Constrictor Alae Nasi*, call'd also *Depressor Labii superioris*; all which are describ'd under the Article **CAPUT**.

**CONSTRINGENTIA.** The same as **ASTRINGENTIA**, which see.

**CONSUETUDO.** Habit, or Custom. In Medicine it is used with respect to the Non-naturals.

**CONSUMMATUM.** In French *Consummé*. A Broth so strong as to concrete into a Jelly, when cold. Frequent Mention is made of this in the French medicinal Writers.

**CONSUMPTIO.** The same as **ANALOSIS**. A Consumption, meaning a Distemper, is the same as **PHTHISIS**, which see.

**CONTABESCENTIA.** The same as **ATROPHIA**.

**CONTAGIO, or CONTAGIUM.** Contagion, or Infection.

**CONTEMPERANTIA.** The same as **TEMPERANTIA**.

**CONTENTA.** Contents. By these in Medicine are understood any Fluids contained within a solid Part of the Body.

Relative to the Urine, the Contents are small Particles collected together as the Urine cools, and appear either at the Top of the Urine, when they are call'd Clouds or *νεφέλαι*; or are suspended in the Middle, and denominated *εναεωήματα*; or else sink to the Bottom, and then acquire the Name of *ύπόςαισι*, or Sediment.

**CONTENTIO, or CONTENSIO,** sometimes imports Tension, or Stricture. Hence,

**CONTENTUS,** Stretch'd.

**CONTINENS FEBRIS.** A continual Fever, which proceeds regularly in the same Tenor, without either Intermission or Remission. See **SYNOCHOS**.

**CONTINUA FEBRIS.** A Fever attended with Exacerbations, and slight Remissions, but no Intermissions. See **SYNECHES**.

**CONTORSIO.** In Medicine has many Significations. First, the Iliac Passion is thus call'd. Secondly, an incomplete Dislocation is thus named, when a Bone is in part, but not entirely, forc'd from its Articulation. Thirdly, a Dislocation of the Vertebrae of the Back sideways, or a Crookedness of these Vertebrae, are called Contorsions thereof. Fourthly, A Disorder of the Head is thus call'd, in which it is drawn towards one Side, either by a spasmodic Contraction of the Muscles on the same Side; or a Palsy of their antagonist Muscles on the other.

**CONTRA-APERTURA.** A Counter-opening. This is sometimes very necessary in Wounds made by Puncture, or a Bullet, in order to discharge whatever is contain'd in the Wound, and prevent its growing fistulous. The Operation, according to *Heister*, is thus perform'd: The Surgeon being provided with a particular Sort of Probe or Needle, blunt at the Top, and arm'd with a Button (A), but at the other End furnished with a pretty large Eye or Hole (B), (*See Tab. 26. Fig. 1.*) introduces it into the Wound or Ulcer, and passes it to the Bottom, directing the Button towards the Skin, and pressing on it with some Force, that it may be felt on the external Part by the Finger. After this, if it may be done with Safety, he cuts the Skin, and other Parts, upon the Button, making a pretty large Opening. He then passes a long, but narrow Piece of Linen, through the Eye of the Probe or Needle (B), if it was not done before; and, impregnating it with some vulnerary Ointment or Balm, draws it through the recent Wound, and leaves it there in the manner of a Seton; after which, he applies Lint, spread with the same Balm or Ointment, to both Wounds, and covers the same with Plaisters, and a Bandage. In every succeeding Dressing he takes care to cleanse the Wounds; and, spreading upon the upper Part of the Seton, or Piece of Linen, some vulnerary Ointment, draws the lower Part, till the other, cover'd with the fresh Ointment, enters the Wound. He continues this Method till the Wound is thoroughly cleansed by the new Opening, the Pus greatly diminished, and no Purulences collected at the Bottom; he then removes the Seton, and heals up the Wounds in the usual Manner.

*Garengot*, in his *Traité des Instrumens*, Tom. 1. describes a triangular Instrument, invented by *Petit*, for this Purpose, which the French call a *Troicar*. With this he makes an Opening at the Bottom of the Fistula, and immediately after draws a Piece of Linen, passed through the Eye of this Instrument, through the whole Cavity of the Wound or Fistula (*See Tab. 25. Fig. 1.*). But as this Instrument of *Petit* is strait, and I have met with Patients, where a new Opening, made by such a strait Instrument, could not conveniently nor safely be made, I had, long before *Garengot's* Book was published, invented another for the Use of a Nobleman, who had a large Abscess in the fore Part of the Abdomen, which, open'd near the Navel, on the Right Side, but penetrated to the Groin, on the same Side. For, because I thought it very dangerous to attempt a new Opening in this Place with a strait Instrument, on account of the adjacent, large, crural Vessels, I directed one to be made almost like those Instruments which are used in extracting Water from hydropical Persons, but somewhat crooked towards the Point, and of a good Length, because it was a long Fistula; this Instrument was also conceal'd in a Cannula (*See Tab. 25. Fig. 2.*). By means hereof, taking care to direct its Apex towards the Skin, a new Opening at the Bottom might safely be made without endangering the crural Vessels. And that I might, at the same time, by means of this Instrument, introduce a Seton, or Piece of Linen, into the Wound, I contrived a Sulcus, like a Ring, near the Extremity, to which I fasten'd the Piece of Linen, by the Help of a strong Thread, and, by drawing back the Instrument, transmitted it through the Fistula. As often as the Piece of Linen is almost spent, but the Wound not thoroughly cleansed, a new one is tied or sewed on to the upper End, and introduced into the Wound, by drawing as before; then cutting off the foul Linen, we proceed in the same manner as before, continuing so to do as long as it shall be thought proper, and avoiding, by this Method, the Necessity of always introducing a new Piece of Linen by means of the Instrument. *Heister Chirurg.*

**CONTRACTIO.** Contraction in general; as of the Heart, Arteries, and Muscles.

**CONTRACTURA.** An Immobility of any of the Joints, induced by a preternatural Contraction of some of the Muscles destin'd, in a natural State, to move them.

**CONTRAFISSURA,** A Contrafissure. This is a Fissure in the Cranium, in a Part thereof opposite to, or at a Distance from, that which received the Injury. This is treated of under the Article **CAPUT**.

**CONTRAHENTIA.** These are Medicines, which, by their contractive Force, render the Length of the Solids less, but their Thickness greater, in consequence of which they in-crustate the Fibres, and render their mutual Connection the stronger. Those are only, for the most part, accounted astrin-gents, which are of Use in a Weakness or Laxity of the Fibres, and the Disorders arising from them; but any one, who diligently reflects upon this Subject, must perceive, that the Causes promoting Contraction may be reduced to these following: First, such as produce a Solution of Continuity in the Fibres; for, when the Fibres are wounded or divided longitudinally, they contract themselves: Hence it follows, that many contracting Medicines act, or produce their Effects, by wounding. Secondly, such things as, by their strong and powerful Action, so dilate the Ducts of our Bodies, that their longitudinal Diameter is lessen'd, and their latitudinal enlarged. Of this Kind are such nutritive Substances as fill the Vessels, stimulating Substances, and all Corroborants. Thirdly, such things as remove the Causes distending the Vessels. Of this Kind are Evacu-ants; for the emptied Vessels contract themselves. The Effects of contracting Medicines may be easily understood; for, if the Solidity of the Fibres is increased, the Strength and Force of the Fibres, Membranes, and Vessels, must of course be augmented. *Rieger.*

**CONTRAINDICATIO.** The same as **ANTEDEIXIS**, which see.

**CONTRALUNARIS.** An Epithet given by *Dietericus* to a Woman who conceives during the menstrual Discharge.

**CONTRAYERVA.**

*Drakena, Contrayerva*, Offic. Mont. Exot. 7. *Drakena Radix*, Ger. Emac. 1621. Raii Hist. 2. 1339. J. B. 2. 740. *Contrayerva Radix*, Ejusd. 2. 741. *Drakena Radix Clusii*, *Bezoardica Radix Tabernemontani*, Chab. 245. *Contrayerva Hispanorum sive Drakena Radix*, Park. Theat. 421. *Contrayerva*, Worm. Mus. 154. Ind. Med. 40. Barr. Icon. 482. Obs. 1398. Boec. Mus. Filic. 277. Tab. 2. 101. Ejusd. Mus. Plant. 168. Tab. 121. *Cyperus longus odoratus Peruvianus*, C. B. Pin. 14. Park. Theat. 218. *Dorstenia Sphondillii folio, dentaria radice*, Pl. m. Nov. Gen. 29. Tab. 8. **COUNTER-POISON.**

This is a longish knotty Root, encompassed on all Sides with small slender Fibres. It is of a light reddish-brown Colour on the



the Outside, and white within; of a pleasant aromatic Smell, but of no very strong Taste.

It is brought to us from the *Spanish West Indies*, being said to grow in *Peru*. It is not certainly known what Plant this is the Root of, most Botanical Writers believing it to be the Root of a Species of *Granadilla*, or *Passion-flower*; but Father *Camelli*, in his Letters to Mr. *Ray*, (which see in his History, Vol. 3. pag. 647.) makes it a different Plant, describing it to have thick, nervous, Plantain-like Leaves, woolly underneath, not at all climbing or branching like the *Passion-flowers*; but his Account of it is so short and obscure, that it has given us but little Light into this Matter. Others will have it to be the Root of a Plant, like a *Virga aurea*, but having solid Seeds. Probably there may be two Species; for I have seen a kind of *Contrayerva*-root, brought over by our *South-Sea* Company's Ships, which was thicker, rounder, and with very few Fibres, appearing like the tuberous Glands of the *Apios Americana*, tho' the Colour and Scent were very like the common *Contrayerva*.

The only official Preparation is the *Lapis Contrayerva*. *Miller's Bot. Off.*

*Lapis Contrayerva*: CONTRAYERVA STONE.

Take of calcin'd Hartshorn in Powder, of red Coral prepar'd, Pearl, white Amber, and Crabs-eyes, of each two Drams; of *Contrayerva*-root powder'd, and the prepar'd Crabs-claws, of each half an Ounce: Mix them together, and make them up into Balls, with a Solution of Gum Arabic.

This is but very lately brought into the *College Dispensatory*, but now very much used in common Prescriptions, as an Alexipharmic. It was before ordered with Jelly of Vipers, and to be covered with Leaf Gold, but they are neither of them of any Consequence: A Dram and a half of Ambergrise was also left at Discretion to be added; but that is so far out of the Intention of the Composition, as to be now quite neglected. Its Dose is from ten Grains to half a Dram.

The *Contrayerva*-root was call'd *Drakena* by *Clusius*, because it was first imported into *England*, in 1581. by Sir *Francis Drake*, on his having finish'd his Voyage round the World. That Species of the Root, which is at present kept in the Shops, is externally of a redish, and internally of a whitish Colour. It is thought best when entirely fresh, and free from Rottenness; when its Taste is at first a little astringent, but, when somewhat longer chew'd, a little acid; and when its Smell is aromatic. From its Smell and Taste it seems, to *Geoffroy*, to be compos'd of a moderate Portion of a volatile, oleous, and aromatic Principle, wrapt up in earthy Parts. Hence we may account for its aromatic Qualities, that is, those by which it stimulates, incides, attenuates, corroborates, resists Poisons, and increases the Motion of the Humours. Hence it becomes proper in Cases where Perspiration is to be augmented, the Body to be heated, and in Fevers in which Coldness is to be surmounted, and the Causes of the Disorder eliminated thro' the cutaneous Pores. *Clusius* informs us, that the Inhabitants of *Peru* esteem it highly as an Alexipharmic; that it strengthens the Heart and vital Faculties, if the Powder of it is taken in a little Wine in the Morning; and that, in Water, it contributes to allay feverish Heats. *Monardus*, who, according to *Clusius*, was the first of the *Europeans* who wrote upon *Contrayerva*, informs us, "That the Powder of *Contrayerva*, exhibited in White-wine, is a speedy and efficacious Remedy against Poisons of all Kinds, except Sublimate, (which can only be cured by copious Draughts of Milk) since it either throws it up by Vomit, or evacuates it by a Diaphoresis." It is also reported, that the Powder of it prevents the Effects of Philtres, and dislodges Worms of the Intestines. *Terentius*, in his Notes upon *Hernand. Hist. Lib. 8. Cap. 58.* informs us, that a Dram, or a Dram and an half, of the Powder, exhibited in a few Ounces of Water, with a Regimen calculated for promoting a Diaphoresis, expels Poisons, and cures the Plague, and other violent Diseases; as also, that Wine or Water, in which this Root has been infused, if drank daily at Dinner, preserves against the Plague and Melancholy, promotes Digestion, dispels Flatulences, and corroborates the Stomach. But because it seems to act by stimulating, resolving, and putting the Humours into a Commotion, we cannot hence reasonably conclude, that it is an universal Antidote. This, to *Wedelius*, seems too hyperbolic an Assertion, since different Poisons require Remedies of different Virtues. In *Europe* *Contrayerva* is principally used against malignant Disorders, and in Cases where the Intention is to excite a Diaphoresis. The learned *Paulus Neuraentzius*, in his Treatise *De Purpura*, solemnly affirms, that he has found it highly efficacious in purple Fevers, in which it carries off the peccant Matter by a Diaphoresis, and rarely operates by Vomit. *Simon Pauli*, in his *Quadripartitum Botanicum*, tells us, that he used to mix the Powder of its Root with a Decoction of the Shavings of Hartshorn, which he exhibited to rich Patients, labouring under malignant Disorders; but, for Persons of a meaner Condition, he order'd the Roots of the greater Burdock to be made into a Decoction with Shavings of Hartshorn. According to *Ludovici*, in his *Pharm.* the Root of *Zedoary* may be commo-

diously used as a Succedaneum to it. Others substitute in its room Substances possessed of aromatic Qualities. Some, in intermittent Fevers, exhibit the Powder of *Contrayerva*, with double the Quantity of *Peruvian Bark*; and against Dysenteries it is exhibited in Conjunction with *Ipecacuanha*. According to the celebrated *Juncker*, in his *Conspectus Therapiae generalis*, it is justly class'd among the powerfully heating Medicines, because it strongly agitates the Mass of Blood; for which Reason it ought not to be an Ingredient in Alexipharmic Essences, tho' it has always been celebrated as highly proper for that Purpose: But it is proper against Apoplexies produced by Serum; in a Weakness and want of Tone in the Stomach, arising from a cold Cause; in catarrhus Disorders; in Defluxions, and in flatulent and pituitous Colics. According to *Schulzius*, in his *Prælectiones*, it is beneficial in malignant Disorders, especially such as rage in Camps, and are accompanied with a Dysentery, because it consists of alexipharmic Particles, mixed with sufficiently mild, earthy, and astringent Parts. From half a Scruple to half a Dram of the Powder may be exhibited in Cases where inciding, resolvent, and heating Medicines are proper. In a liquid Form, infused in Wine, the Dose may be double or triple of this. It is an Ingredient in many alexipharmic and bezoardic Compositions. When subjected to a Chymical Analysis by *Wedelius*, its Root, put into a Retort by itself, and distill'd in a Sand-heat, yielded first a Phlegm, then an acid Spirit, like Spirit of Tartar, which produc'd an Effervescence with an Alkali, and whose Colour was at first redish, but afterwards became obscurely yellow, with a Cast of Red; after this succeeded an Oil, which was thick, acid, inflammable, and empyreumatical; and from the Caput Mortuum, calcin'd in a very brisk Fire, was obtain'd a fixed alkaline Salt, like Salt of Tartar or Pot-ash. With respect to the Essence of *Contrayerva*, prepared with rectify'd Spirit of Wine, *Schulzius*, in his *Prælectiones*, uses the following Words: "I am afraid," says he, "that the Spirit of Wine is so far from extracting its Virtues, and conveying them to the Body of the Patient, that it would be more proper to exhibit it in Substance. Half a Dram of it may be exhibited for a Dose, except in Cases where, on account of the Spirit of Wine, we ought to be more sparing." *Willis*, in his *Pharmaceutice Rationalis*, makes the Dose of this Tincture from half a Dram to a whole Dram. It is surprizing, that this Root should be found to communicate more of its Parts to an aqueous, than to a spirituous Menstruum; for, when infus'd in common Water, it yields a larger Quantity of Extract than with Spirit of Wine. Hence we may conjecture, that the Use of the aqueous Extract is safer than that of the spirituous, as it exagitates the Humours less. We must not here forget the Experiments made with the Tincture of this Species of *Contrayerva*, from which every one is at Liberty to draw his own Conclusions, with respect to its Nature. Rain-water then soon extracts a Tincture, obscurely red, from bruised *Contrayerva*-root. The same Effect is also produc'd by Spirit of Wine, but the Tincture is of a more brisk and lively Colour. The Tincture extracted with Water immediately becomes turbid upon an Admixture of Aqua Fortis, and a large Number of red Flakes subside to the Bottom: It is also render'd turbid by Salt of Tartar, but more slowly; and the subsiding Flakes are smaller, and fewer in Number. The Tincture extracted with Spirit of Wine, when mixed with that extracted with Water, immediately became milky, which it also did with Aqua Fortis; but Salt of Tartar seem'd to produce no Change in it. These Experiments are related by *Heide*, in his *Observationes Medicinæ*. There are several celebrated Shop-medicines, in which *Contrayerva* is an Ingredient; such as the *Lapis Contrayervæ*, in the *London Dispensatory*; the *Syrupus Contrayervæ*, in the *Pharmacop. Argent.* and several others to be met with in the *Dispensatories*.

The *Contrayerva Nova*, commonly distinguished by the Epithet *Mexicana*, was imported into *Europe* after the former Species, and is thought to be produced in *Mexico*. It is pretty large, about two Fingers thick, externally rough, and of a brownish Colour; internally white, with a Pith in the Middle, like the *Contrayerva* already mentioned, of a sweetish aromatic Taste, but little different from the antient *Contrayerva*, to which it is not thought inferior. On account of its alexipharmic, diaphoretic, and antifebrile Qualities, it is prescribed in Conjunction with Absorbents for the Cure of malignant and petechial Fevers, Measles, and the Small-pox. *Contrayerva* is not, therefore, the Product of *Peru* alone, as the *Spaniards* assert; for we learn from Mr. *Des Marchais's Voyage en Guinée*, that *Contrayerva*, an Inch and an half thick, and four or five Inches long, is produc'd in *Guiana*, a Province of *South America*.

CONTRAYERVA ALBA. See VINCETOXICUM.

CONTRAYERVA GERMANICA. See ACONITUM.

CONTRAYERVA VIRGINIANA. See SERPENTARIA VIRGINIANA.

CONTRITIO, in Pharmacy, is Comminution.

CONTUSA. Contus'd Wounds; that is, Contusions or Bruises.

If an obtuse hard Body, either by its Motion, Resistance, Pinching, or Pressure, causes a Rupture of a great many small



small Vessels at once, the Injury thus received is call'd a *Contusion*.

A *Contusion* is a Solution of Continuity, produced in any Part of the Body, by an Instrument whose Surface does not rise by way of Edge, but in any obtuse Figure. By this means a *Contusion* is distinguished from a Wound, which is a Solution of Continuity produc'd by a sharp cutting Instrument. Hence a *Contusion*, if all other Circumstances are alike, possesses a larger Space than a Wound, because, in the former, a larger Portion of the Surface of the wounding Instrument is applied to the Body. Now 'tis sufficiently obvious, that, since Action is equal to Reaction, the Effect will be the same, whether the obtuse Body, put in Motion, strike the Part of the Body, or whether the Part of the Body, put in Motion, strike upon the hard obtuse Obstacle in a State of Rest; whether the obtuse Substance, by its Gravity, acts upon any Part of the Body; or whether that Part of the Body, by any kind of Pinching, is contus'd.

We must, therefore, consider a Contusion as an Accumulation of minute Wounds, with an Attrition of the Solids, and capillary Vessels.

In the Place contus'd we may conceive as many small Wounds, as there are Parts injured in the whole Circumference of the Contusion: Hence the Aggregate, or Sum total, of the minute Wounds adjacent to each other, gives the clearest and most adequate Idea of a *Contusion*. Thus, for Instance, when an Artery is cut asunder by a Razor, a Wound is made in that Artery; but when it is divided by a large Number of small Incisions, made very contiguous to each other, a *Contusion* of that Artery is nearly represented. Those Parts that are hard, solid, and consequently capable of making Resistance, are, by the Cause producing the Contusion, mangled and shatter'd into the smallest Fragments or Portions. Thus, for Instance, when the Bone of the Arm is, by any Cause, broken in two Pieces, this is call'd a Fracture; but, when it is shattered in small Portions, it is then said to be contus'd.

The Effect, therefore, of a Contusion is,  
*First*, A lacerating Solution of Continuity.

That is Dilaceration, which happens when the soft Parts of the Body are, by any distrañile Force, broken or drawn asunder. This Distraction accompanies every *Contusion*, which is, by this, distinguished from a Wound, in which there is also a Solution of Continuity, but not a Distraction or Dilaceration, since a Wound is inflicted with a sharp Instrument. A Contusion may, indeed, accompany a Wound; but then the Disorder is of the complicated Kind.

*Secondly*, An utter Destruction of many of the small Parts.

In a Wound, there is only a simple Division of those Parts which before coher'd: Hence it often happens, that the largest Wounds are successfully cured, whilst the divided Parts, when brought into mutual Contact, coalesce, and grow together again. But in Contusions, the Parts are frequently so mangled, and their vital Structure and Make so destroy'd, that it becomes impossible to produce a mutual Union and Coalescence among them. Hence, in the Cure of Contusions of this Kind, a Separation of all these Parts is necessary, because, being totally deprived of a vital Influx of the Humours, they, of consequence, become mortify'd, and like a heterogeneous Body, by their Intervention, prevent the Union of the adjacent live Parts. For this Reason *Hippocrates*, in his Book *De Ulceribus*, justly affirmed, *That contus'd Flesh must necessarily be converted into Pus, and separated from that which is sound*. Hence he advis'd a Suppuration to be brought on with all possible Expedition.

*Thirdly*, An Effusion of Liquids into the adjacent Cavities, or Cavities form'd in consequence of the Injury; besides many other bad Effects.

When the Vessels are broken or dilacerated, the Fluids contained in them are discharged, and lodged in other Places, where they ought not to be. *Hippocrates*, in his Treatise *De Arte*, did not hesitate to pronounce, that the whole Body was full of Cavities; For, says he, *every Part of the Body, which is not of a compact or concentered Nature, is full of Cavities, whether it be covered with Flesh or Skin. The Cavities which are sound, and in their natural State, are filled with Air, whereas those which are disorder'd and indispos'd, are filled with Ichor*. Hence the discharged Humours will every-where find an easy Access to these Cavities, whether large or small; for almost every Vessel, and every muscular and tendinous Fibre in the Body, is sheathed up in a Membrane, which is easily dilatable, and which consists of a large Number of small Cells, which have a mutual Communication with each other. Those lesser Cavities, or Cells, are therefore dispersed thro' the whole Body, and may be fill'd with the Humours discharged from the dilacerated Vessels (see *CELLULOSA MEMBRANA*). This is still more palpable and obvious, with respect to the larger

and more considerable Cavities of the Body, such as the Ventricles of the Brain, the Cavity of the Thorax, the Tracheæ, and Vesicles of the Lungs, the Pericardium, the Abdomen, and the Stomach. But the Humours, thus discharg'd, may not only fill the natural, large, and minute Cavities of the Body, but also, by being accumulated there, distend them, and of course separate and disjoin the Parts before contiguous to each other; in consequence of which, new Cavities are either form'd, or the Capacity and Bulk of such as are natural surprisingly enlarged. Whilst, for Instance, after a violent Contusion of the Head, in which the Vessels of the Dura Mater are dilacerated, and the discharged Blood collected between it and the Cranium, the Dura Mater is separated from the Cranium, to which it before adher'd; by which means a new and preternatural Cavity is formed.

The whole Train of Symptoms, subsequent to a Contusion, may be reduced to three Classes; for, first, they arise either from this, that when the Solids are destroy'd, and the Humours discharged, those Functions are abolished, which depend upon a due and determinate Motion of the Fluids through the sound Vessels: Or, secondly, they arise from this, that the discharg'd Humours, collected either in the natural or preternatural Cavities of the Body, by their Bulk and Quantity press upon the adjacent Parts, and either totally destroy, or at least disturb, their respective Functions: Or, thirdly, the Humours, thus discharged, may, by their Continuance and Stagnation in the Cavities, acquire such a Degree of Acrimony, as to corrode and destroy the adjacent Parts. If these three Classes are diligently considered, and applied to the several Parts of the Body, it will be sufficiently obvious, that numberless Symptoms may happen, which cannot possibly be enumerated. A Case, related in the Memoirs of the Royal Academy of Sciences for the Year 1713, sufficiently informs us, that Contusions may be followed with a Series of very surprising Symptoms, and such as cannot be foreseen by the most skillful and knowing Surgeons; for a Man of sixty Years of Age had the Misfortune to have a Carriage or Waggon drawn over his Breast, by which his Ribs were so contus'd and fractur'd, that a Splinter of one of the Ribs had only gently dilacerated the external Membrane of the Lungs. Hence a Part of the inspir'd Air, passing through this small Wound, insinuated itself into the cellular Membrane, and inflated almost the whole Surface of the Body with a surprising Emphysema; by which means the miserable Patient was suffocated on the fourth Day. The celebrated *Paré*, in the sixth Chapter of his twelfth Book, makes mention of such a flatulent Swelling happening about the Ribs after Contusions, tho' he seems not to have been perfectly acquainted with the Cause of this Phenomenon. Numberless Observations occur in practical Authors, which inform us, that, by violent Contusions, tho' no Injury appear'd in the external Parts, the Liver, the Spleen, and other Organs, have been frequently broken, and a sudden Death brought on. It has also sometimes been observed, that violent Contusions have been followed by immediate Death, when no remarkable Injury appeared to be done, either to the internal, or the external Parts. *Bohnus*, in his Treatise *de Renunciatione Vulnerum*, supplies us with a memorable Instance of this Nature. A certain Man was struck on the Right Hypogastrium by a Stone, weighing several Pounds, and thrown with considerable Force, upon which he dropt down, and died immediately. When, by the Order of the Magistrates, *Bohnus* inspected the Carcase, he found no manner of Injury either in the Integuments, Vessels, or Viscera; only in that Part of the Diaphragm which was contiguous to the spurious Ribs on the Right Side, he observed a Kind of Contusion and Sugillation, the whole Circumference of which scarce exceeded that of half an Imperial.

But the worst Sort of Contusion is, when the internal Parts are affected in the manner already describ'd, whilst the Integuments cohere, and confine the extravasated Fluids within; which, therefore, stagnate, coagulate, and putrefy.

The Skin is so tough, and the mutual Cohesion of its Parts so strong, that it is not easily broken with an obtuse Instrument; whereas the Vessels lying under it, and running thro' the Panniculus Adiposus, are far more tender, and consequently more easily broken. Thus, when any one strikes his Finger with a Mallet, the Skin generally remains sound, but a black Spot, produced by the Effusion of the Blood from the ruptured Vessels under the sound Skin, deforms the contused Part, and renders it unseemly. This Effect is in a more particular manner produced, when the Vessels, lying under the Skin, are, by the Cause making the Contusion, forcibly dash'd against the hard subjacent Bone. Hence it is, that so large Tumors arise so suddenly, when the Head is struck against any hard and resisting Obstacle. But the Humours thus discharged from the dilacerated Vessels, being pent up and confin'd by the sound Skin, are accumulated, stagnate, and of course coagulate in the cellular Membrane, and may at last become putrid; tho' this last Accident will not happen very soon, if no Access is permitted to the external Air. Various Misfortunes arise from this, the principal of which are these following:

*First*,



## First, An Ecchymosis.

This is an Effusion of the Humours from their respective Vessels under the Integuments, and which, by *Paulus Aegineta*, in *Lib. 4. Cap. 30.* is defined in the following Words: "When, says he, the Flesh is contused by the violent Collision of any Object, and its small Veins broken, the Blood is gradually discharged from them." This Blood, when collected under the Skin, produces what we call an *Ecchymoma*. The Skin, in the mean time, remaining entire; a Tumor, which is soft, yielding to the Touch, livid, and, for the most part, without Pain, is form'd. *Galen* also, in *Commentar. in Aphor. 20. Sect. 6.* defines an *Ecchymosis* an Effusion of the Blood into the Cavities or Interstices contiguous to the Vessels; and, in *Commentar. 3. in Librum Hippocrat. de Medici Officina*, he uses these Words: "When contused Flesh discharges the Blood under the Skin, this Disorder is call'd *ἐκχύματα*."

## Secondly, A spurious Aneurysm.

When, for Instance, in consequence of the Injury done to a large Artery, a considerable Quantity of discharged Blood is collected in the Panniculus Adiposus under the Skin: Hence if, in consequence of a Rupture or Dilaceration of the smaller Vessels, a moderate Quantity of Blood is collected under the sound Skin, it is call'd an Ecchymosis: But if, in consequence of the Rupture of a large Vessel, the Skin is distended with the extravasated Blood, it is call'd a spurious Aneurysm.

## Thirdly, Sugillation.

When the Pressure of the Atmosphere on the Surface of any Part of the Body is either lessen'd, or almost totally removed, whether by Suction, or the Application of Cupping-glasses, the Blood rushes into those Parts which are less press'd upon by the Air, distends the Vessels, and enters the small dilated Vessels, in which there is naturally no red Blood. In these Vessels the Blood is often so firmly impacted, that it cannot return: Hence red, livid, and frequently black Spots, are produced. For this Reason such a Spot, remaining after the Suction of any Part, is call'd Sugillation. But when any Part of the Body is struck with a Mallet, for Instance, the Blood-vessels being suddenly compress'd by this Blow, the Blood may be forced into the ferous and lymphatic Vessels; and produce such a Spot, by remarkably changing the Colour of the Skin. Sugillation, therefore, differs from an Ecchymosis in this, that, in the latter, the Blood is discharged from the ruptured Vessels into the adjacent Interstices or Cavities; whereas, in a Sugillation, the Blood, in consequence of the strong Pressure, enters other Vessels, in which it ought not naturally to be; but which, at the same time, remain sound and entire: For this Reason the Sugillation rather appears in the Parts adjacent to that contused, than in itself. But 'tis obvious, that an Ecchymosis and a Sugillation often accompany each other, after violent Contusions; for which Reason these two Words are, by some Authors, frequently confounded, and promiscuously used, as importing one and the same Thing.

## Fourthly, Ulcers and Gangrenes.

When, for Instance, the discharged Humours, becoming corrupted in consequence of their Stagnation, inflame or corrode the adjacent Parts. Sometimes also a Suffocation is produced, when, for Instance, the cellular Membrane is preternaturally distended by the discharged Humours; whence Gangrenes, and the most fatal Putrefactions, may ensue.

## Fifthly, Caries.

When, for Instance, the above-mention'd Disorders penetrate so deep as to affect the Bone.

## Sixthly, Scirrhus and Cancers in the Glands.

Since, from anatomical Discoveries, 'tis certain, that the Glands consist of a large Number of small Arteries, by whose various Disposition there is separated, from the arterial Blood, another Liquor, which, being collected, is discharged through their excretory Ducts; 'tis obvious, that, these Parts being injured by the Contusion, the small Vessels may be by this means destroy'd; or that the Emunctories of the Glands may be so compress'd or obstructed, as to prevent the free Discharge of the Humours secreted thro' the arterial Fabric of the Glands: Hence, from the Stagnation of these Humours, the Exhalation of their more fluid Parts, or their Absorption into the small Veins, arises an Inspissation of the secreted Fluid; by which means a Tumor is produced, which is hard, scarce capable of Discussion, and indolent. This Species of Tumor is, by Physicians, call'd *Scirrhus*; and, when it becomes inveterate, highly hard, rough, and accompanied with Pain, it is call'd a *Cancer*.

Contusions often affect the Bones, and are then productive of Disorders analogous to those which are caused by Contusions of the Head (describ'd under the Article *CAPUT*): Hence the Marrow is injured; and from this Source arise

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Ulcers, Fistulas, Caries, and Putrefaction; for the Marrow is situated in the Bones, as the Brain is in the Cranium.

When the Contusion affects the Bones themselves, the Vessels distributed between the small Lamellæ, which constitute the Fabric of the Bones, may be either compress'd, or totally destroy'd: Hence the vital Influx of the Humours into these Lamellæ is abolish'd, which, therefore, becoming mortified, must necessarily be separated from the live subjacent Parts. This Disorder may gradually spread and diffuse itself thro' the whole Substance of the Bone, as is explain'd under the Article *CAPUT*.

As for Injuries done to the Marrow of the Bones, these are greatly to be dreaded in Contusions; for the Marrow is deposited in the Cavities of the larger Bones, and a Substance of a similar Nature is dispersed thro' the bony Cellule. As the Brain is defended from Injuries by a bony Covering, so the Marrow is lodged in the Cavities of the Bones. In like manner, as the Brain is cover'd with a peculiar Membrane, call'd the *Pia Mater*, which receives and preserves the Vessels, which enter the Substance of the Brain; so the Marrow is surrounded with a very tender Membrane, destin'd for similar Purposes. The arterial Vessels of the *Pia Mater* appear very tender, after they are divested of their thicker Coats. This same Circumstance holds true, with respect to the Vessels distributed to the Substance of the Marrow. Thus the Marrow, taken from the Thigh-bone of an old Ox, may, by the Fingers, be easily reduced to a kind of oleous colliquated Mass; tho' 'tis certain, that this Marrow receives Supplies from numberless Arteries, which are distributed to it. As, when the Cranium is fissured, fractured, or contused, the Disorders, arising from an Effusion or Corruption of the Humours, may affect the Brain itself; so Injuries done to the Bones may, in like manner, prove prejudicial to the Marrow contain'd in them. As by a violent Concussion of the Head the tender Vessels of the Brain may be destroy'd, whilst, at the same time, the Cranium remains sound and entire; so the like Misfortune may happen to the Marrow, when the Bones, in which it is lodged, are forcibly struck. But when the tender Vessels of the Marrow are injured by having the Disorder of the surrounding Bone communicated to them, or by any other Cause, the medullary Oil, discharged from the ruptured Vessels, will stagnate, acquire a rancid Acrimony of the worst Kind, corrode all the adjacent Parts, and render the Bone itself carious: Hence arise malignant Ulcers, and such as scarcely admit of a Cure; obstinate Fistulas, not to be heal'd till this medullary Corruption is removed; a virulent oleous Putrefaction, preying upon all the adjacent Parts; and numberless other Disorders.

Sometimes the muscular Parts are injured by Contusions; whence considerable Suppurations, Gangrenes, Palsies, and Contractions. But if, from a Contusion, any large Nerve, which sends out a great Number of Branches, is corrupted, then a Palsy, Atrophy, certain and incurable Insensibility, or Gangrene, of all the Parts below the contused Nerve, ensue. And this is in a particular manner true, with respect to the Spine of the Back, and the Medulla thereof.

As for the muscular Parts, when injured, 'tis certain, from anatomical Discoveries, that every visible Muscle may be separated into smaller Bundles of muscular Fibres: Nor hitherto, even by the Assistance of Microscopes, has any End of such a Separation or Division been found; for no one ever yet saw a single muscular Fibre, but only a Congeries of them collected into one common Body. These Bundles of muscular Fibres are inclosed in a thin cellular Membrane, which contains a certain subtle pinguious Fluid, destin'd for the Lubrication of the Fibres. So incredible a Number of Arteries are distributed among the Interstices of these Bundles, and in the cellular Membrane, lying between them, as is certain from the Injections of *Ruyssch*, that they seem almost to constitute or make up the whole Substance of the Muscle. These Arteries have also correspondent small Veins and Nerves distributed thro' the Substance of the Muscle. When, therefore, a Muscle is contused, these Vessels may be ruptured, and the Humours discharged into the Cavities of the cellular Membrane, where, being collected, they may compress the adjacent Parts. These extravasated Humours may also be corrupted, and, acquiring an Acrimony, corrode the contiguous Parts: Hence Inflammations, Suppurations, Gangrenes, and other Disorders arising from them, may be produced. Suppurations, proceeding from this Cause, are, of all others, the worst; because the Pus, form'd in the cellular Membrane, surrounding the muscular Fibres, will find out uncommon Ways for itself, and may spread thro' all the Windings and Meanders of this Membrane, and by that means produce the worst of Sinuses and Fistulas. Add to this, that, by a long-continued Suppuration, this cellular Coat being consumed, which not only separates the Bundles of Fibres, but also, in all Probability, the single muscular Fibres from each other, these would coalesce, and grow together;



ther: Hence the free Expansion of these Fibres, by the Causes which distend the Muscles, when acting, will be prevented, and muscular Motion either depraved, or entirely destroy'd. The muscular Fibres themselves, properly so call'd, may also be destroy'd by a strong Contusion: Hence muscular Motion, to which the sound and entire State of these Fibres is requisite, will cease, and a Palsy of the Muscle, that is, an Inability of exerting its proper Motion, together with a preternatural Laxity, will be produced. From this Cause Contractions may also arise, when, by a strong Suppuration, the cellular Membrane, which separates the muscular Fibres, being destroy'd, these grow together, and become impervious to the finest Humours: Hence they are gradually shorten'd, and can never afterwards be drawn out, to their former Length, by any Force. From this, surprising Contractions of the Members may arise; as also from this, that, when the Action of any Muscle is destroy'd, its antagonist Muscle continues to act, and continually draws the Member, to which it is affix'd, to its Origin; by which means that Member, at last, becomes stiff; and for this Reason 'tis, that Contractions are so frequently subsequent to long-continued Palsies.

But when, by a Contusion, some of the muscular Fibres are dilacerated in such a manner, as not to destroy the Action of the Muscle, this seems to be another Disorder, which is, indeed, highly painful; and which the antient Physicians call'd *σπασμα*, or Divulsion, and *ρήγμα*, a Rupture. Galen, in *Commentar. 3. in Librum Hippocrat. de Medici Officina*, when speaking of a Contusion, uses the following Words: "It is certain, that, in the Formation of Ecchymoses, [*εγχυμωματα*] the small Veins are divided with the Flesh: But Divulsions [*σπασματα*] happen in the muscular Fibres, when some of them are so preternaturally distended as to break; and the later Physicians call these Disorders *Ruptures*, [*ρήγματα*] which were first mention'd by Hippocrates." These Ruptures are, by Hippocrates, in his *Treatise de Morbis, Lib. 1. Cap. 8.* describ'd in the following Words: "In some Cases, says he, when gentle Divulsions are made in the Flesh or Veins, no Suppuration ensues; but long-continued Pains are brought on, and these Divulsions are call'd [*ρήγματα*] Ruptures." In the End of the same Chapter he adds the following Words: "Divulsions are produced by too violent Exercise, by Falls, by Wounds, by lifting too heavy Burdens, by Running, by Wrestling, and other Things of a like Nature." He also seems to have had these in his View, when, in his *Coacæ Prænotiones*, he uses these Words: "All Divulsions are indeed troublesome, and, at first, accompany'd with intense Pains; from which they are not entirely free in the future Course of the Disorder: But Divulsions of this Kind, happening about the Thorax, are most dangerous, and cured with the greatest Difficulty." It is to be observed, that some Translators have render'd the Word *σπασματα* by *Convulsions*, but very improperly; since the Word *σπασμοί* was, by the Greeks, us'd for *Convulsions*. Galen, in *Method. Medend. Lib. 4.* observes, that the small muscular Fibres, when thus disjoin'd, are, with Difficulty, reunited; for he was of Opinion, that the divided Flesh would easily coalesce, if the Ecchymosis is sufficiently soon discuss'd; but when it was a considerable Time before this Effect was produced, he thought, that the collected Sordes interposed themselves between the disjoin'd Fibres, and prevented their Reunion: Hence the Pain is renew'd by too intense Exercise, the Access of a Fever, too languid a Concoction of the Aliments, and other Causes of a like Nature. An Effect, somewhat analogous to this, is observed, when, after strong Efforts, or the Attempts to lift too heavy Burdens, very intense Pains arise suddenly, which often rack the Patient for a long time, and are increased by the least Motion of the Body. 'Tis undeniably confirm'd by Experience, that, in Pains of this Kind, an entire and uninterrupted State of Rest is the most efficacious Cure: And Hippocrates, in his *Treatise de Morbis, Lib. 2.* in [*ρήγματα*] Ruptures of the Breast or Back, order'd the Patient to abstain from Labour for a whole Year. In his *Treatise de Morbis internis*, after he has told us, that this Disorder was produced by immoderate Exercise, he informs us, that Rest is absolutely necessary, otherwise the Disease returns in a more terrible Shape, than that in which it first appear'd.

As for the Corruption of large Nerves, in consequence of a Contusion, if we consider the Nerves, with respect to their Origin, as arising from the Medulla Oblongata, or the spinal Marrow, 'tis obvious, that they are highly soft. If the Extremities of the Nerves are view'd in those Parts, where, being divested of their Coverings, they constitute that corporeal Organ, by a Change induced in which, by external Objects, new Ideas are convey'd to the Mind, by means of the Senses, they appear surprisingly tender. This is sufficiently confirm'd by the highly soft Pulp of the auditory Nerve, and by the Retina of the Eye, which collapses to a shapeless Mucus, unless preserved in its natural State by the uniform and equable Pressure of a circumambient Fluid. But these surprisingly tender nervous Stamina are safely convey'd to the Extremities of the Body, by

being defended and wrapt up in tough Coats. If, therefore, a large Nerve, in its Course from its Origin to the Extremities of the Body, should happen to be contused, this pulpy and surprisingly soft Substance may be injur'd, or even destroy'd, tho' the Coat or Covering of the Nerve should appear to be unhurt. By this means all those Functions will be destroy'd, which depend upon the Soundness of the Nerves collected and terminating in this large Nerve. This is obvious from the Experiment made by *Valsalva*, and mention'd under the Article *CAPUT*; for when that Anatomist tightly applied a Thread to the cardiac Nerves of a Dog, and immediately removed it again, the Animal, a few Days after, died in the same manner as if these Nerves had been cut off; and yet, after the Death of the Dog, no sensible Injury appear'd to have been done to these Nerves; but the Ligature had so compress'd the pulpy and nervous Substance itself, that the free Influx of the Spirits, into these Nerves, was totally intercepted.

But the Reasons why an incurable Gangrene should follow, upon the Destruction of a large Nerve, and more especially an Injury done to the spinal Marrow, are enumerated under the Article *VULNUS*; where memorable Cases are also related, in Confirmation of this Truth.

Sometimes Contusions injure the Viscera; whence arise Inflammations, Suppurations, Gangrenes, Scirrhuses, and a Depravation of the Functions peculiar to the Part affected.

What terrible Disorders may arise from violent Contusions of the Head, even when the Brain is not injured by them, is observed under the Article *CAPUT*. The Viscera, contain'd in the Cavities of the Breast, are safely inclosed, and everywhere defended by the Ribs, the Sternum, and the Spina Dorsi: Yet the surprising Case already specified informs us, that these Viscera may also be injured by Contusions; since, in it, a Splinter of the Rib lacerated the external Membrane of the Lungs, upon which an uncommon Emphysema and Death ensued. The abdominal Viscera are more subject to be injured by Contusions, as the greater Part of the Abdomen is only cover'd with soft Integuments. The Spleen, however, and most Part of the Liver, are defended by the spurious Ribs. But that, in consequence of violent Contusions, these Viscera have sometimes been crack'd, and sudden Death produced, is obvious from the medicinal Observations specified under the Article *VULNUS*. Nor does this appear in the least surprising, when we consider, that the Liver and Spleen are so tender, that the highest Caution is necessary, in order to take them entire from a Carcase: Hence it is, that violent Contusions of the Abdomen prove so frequently, and so suddenly, mortal. *Paré* informs us, that, whilst two Prize-fighters were putting their Strength and Dexterity to the Test, the one, who was of a low Stature, but well made, forcibly threw the other, who was taller, on the Ground; but, being enraged at this, he afterwards seiz'd his Adversary, and throwing him down, with his Elbow placed upon the Pit of his Stomach, and thus falling on him with the Weight of his whole Body, he kill'd him on the Spot. In the Carcase, when inspect'd, a large Quantity of extravasated Blood was found in the Cavities both of the Thorax and Abdomen. Numberless Observations occur in practical Authors, from which 'tis certain, that various Viscera have been so injured by violent Contusions, that Death, or the most terrible Disorders, have ensued; for, by these Contusions, the Vessels may be ruptured, and the Humours discharged; and these extravasated Humours, becoming corrupted, may, by corroding the adjacent Parts, produce very terrible Symptoms; such as an Inflammation, with all its Consequences, a Suppuration, for Instance, a Gangrene, and the other Effects of Inflammation. And since all the Functions of the Viscera depend upon the sound and entire State of the Vessels, and the due Circulation of the Fluids thro' them, 'tis also obvious, that these Functions may not only be depraved, but totally abolish'd and destroy'd.

From what has been said, many and miserable Disorders, the Consequences of Contusions, may be readily explain'd and prognosticated, and these both of the acute and chronic Kind.

If what has been already said with respect to the true Nature of a Contusion, and the Effects necessarily accompanying every Misfortune of this Kind, be applied to the several Parts of the Body, which may be injured by Contusion, it will be sufficiently obvious, what Symptoms are to be dreaded; and these may be safely prognosticated from a Knowledge of the Structure and Use of the particular Parts contused. Thus, for Instance, if any one, by a Fall, has dash'd his Right Hypochondrium against some hard and obtuse Obstacle, and if soon after a preternatural Yellowness appears in his Eyes and Skin, we, by this Circumstance, know, that the repell'd Bile has contaminated the Mass of Blood; and, consequently, that the Region of the Gall-bladder, and the Liver itself, are injur'd by the Contusion. Now, if we consider, that the Substance of the Liver is so tender, that it resembles a Sponge full of Blood, 'tis highly



highly to be dreaded, lest, by a Rupture of its Vessels, a large Quantity of Blood should be discharged into the Cavity of the Abdomen: Hence Convulsions, Faintings, and often speedy Death, will ensue. If, on the contrary, the Disorder is but slight, and only the smaller Vessels, distributed through the Substance of the Liver, ruptured, the discharg'd Humours, by pressing the adjacent Vessels, or, if they become corrupted, by corroding them, may produce an Inflammation, a Suppuration, and a Scirrhus, in this Organ: Hence, after suffering the most intolerable Agonies, a slow Death will ensue. If the Region of the Loins is injured by a violent Contusion, and a Discharge of bloody Urine ensues, we, from this Circumstance, know, that the small Vessels of the Kidneys are ruptured; by which very terrible Disorders will be frequently produced; for the Clots of coagulated Blood, falling into the narrow Parts of the Pelvis and Ureters, will entirely intercept the Passage of the Urine from the Kidneys to the Bladder: And hence an Inflammation of the Kidneys, and an Ischury, or Retention of Urine, will be brought on. Besides, a small Clot of Blood, remaining in these Parts, may afford a proper Basis, around which a Stone may, in Process of Time, be form'd, which will prove a fresh Source of other Disorders. Now, if we consider, that the same Misfortune may happen in any of the other Viscera, it will be sufficiently obvious, that numberless Disorders may ensue, which will either soon destroy the Patient; when, for Instance, the Humours are extravasated, or when the Fabric and Structure of those Parts, whose Soundness is absolutely necessary to Life, are destroy'd; or else, when some of the Functions of the Parts are only deprav'd, the Life of the Patient may be preserved; but, at the same time, the State of his Health will be far from being good. From this Source chronic, and often incurable, Disorders will proceed. This is confirm'd by the lamentable Case of a celebrated General, who, when mounted upon a high-mettled Horse, rush'd in upon the Front of his Enemies: But the Horse, happening to be wounded, suddenly sprung upwards, by which means the Rising of the Saddle was forcibly dash'd against the Region of the Stomach. This Misfortune was immediately succeeded by a copious vomiting of Blood. But as this brave Soldier did not observe a moderate Regimen, and not only lived intemperately, but also entirely neglected his Misfortune, he, indeed, surviv'd the Accident for a considerable Time, but was afterwards constantly afflicted with various Pains of his Stomach, and then with a troublesome Vomiting and Dysentery, till at last Death put an End to his Misery. Upon laying his Body open, a large Part of his Liver, and the Whole of his Pancreas, were found cancerous. Terrible Disorders are in like manner produced by Contusions of the Testicles. *Van Swieten* informs us, that he saw one of the Testicles render'd scirrhus by a Contusion, which, being afterwards unskillfully treated with emollient and suppurating Medicines, grew to such an enormous Bulk, that the Scrotum, with the included Testicle, almost reach'd the Patient's Knee. This Testicle, as that Author informs us, was afterwards consumed by a Cancer of the worst Kind; which, after subjecting the Patient to the most intolerable Pain, at last killed him, though his Constitution, in other respects, was sound and vigorous.

A Contusion is discovered, and the Part affected is distinguished,

*First*, By the Sight and Touch.

For when Vessels are ruptured under the entire Skin, the extravasated Humours fill and distend the Panniculus Adiposus: Hence the Tumor and Softness of the contused Part are subjected to the Sight and Touch, especially in Contusions of the Head; because the hard subjacent Bone of the Cranium contributes to make the extravasated Humours raise and elevate the Skin more than they would otherwise do. Hence it happens, that so enormous Tumors are often so suddenly produced by Contusions of the Head.

*Secondly*, By the Effects; as Pain; Stupor; a Sense of Gravity; a Change of the natural Colour to red, brown, lead Colour, black, yellow, or green; Hæmorrhage; or Gangrene.

Almost every Contusion is accompanied with Pain. But, when, in consequence of a very violent Contusion, all the Vessels are almost destroy'd, then the Pain is either none at all, or at least very faint and slight: In this Case, there is a Stupor, and Sense of Weight, in the Part affected; which denote, that the Nerves in the contused Part are either destroy'd, or so compressed by the extravasated Humours, or the Cause producing the Contusion, that they are render'd incapable of Sensation. But since the extravasated Blood is collected under the Skin, which, for the most part, remains entire, the Colour of the contused Part is changed in proportion to the Quantity of extravasated Blood, and the Time elapsed since the Contusion was made; for a slight Contusion is only at first succeeded by a redish Colour of the Part; for when the small Vessels are ruptur'd, they only discharge an inconsiderable Quantity of Blood. But this redish Colour will in a few Hours become

more dark, and at last assume a blackish Cast. But, after severe Contusions, the Colour of the Part affected is often speedily chang'd into a lead Colour, or becomes livid, and frequently blackish; because a large Quantity of concentered Blood is lodg'd under the Skin, which still remains entire. And though at first the Colour of the Part was red, yet afterwards, when the finest Part of the extravasated Blood is dissolv'd, or again absorb'd, the Remainder of it is of a blackish Colour. Nor ought this leaden and livid Colour of the contused Part to strike a groundless Terror in the Surgeon, because it is not always a Sign of a Gangrene; for a Part, becoming livid in consequence of a Gangrene, is distinguished by its Coldness, and by the small Bubbles which arise on the Epidermis, and are full of Ichor. When the concentered Blood begins to be gradually resolved and dissipated, then the leaden, or even the blackish, Colour becomes proportionably fainter, and begins to assume a redish Cast. A yellow or slight greenish Colour, also, appears about the Margins of the Contusion, in proportion as the red Parts of the Blood are gradually resolved and dissipated; which denotes, that the extravasated and concentered Humours begin to be dissolved. Almost every one knows, that when Blood is taken from the Vein of a sound Man, it is soon after separated into two distinct Substances; that is, the limpid, yellowish Serum, and the red, concentered Part, which swims in it. If all this Serum is poured away, a few Hours after, a considerable Quantity more will appear; whilst, in the mean time, the red concentered Mass is gradually lessen'd, and melted down into Serum; so that, by often pouring off the Serum, almost the Whole of the red and concentered Part is consumed. This seems also to happen in Contusions, because the concentered Blood is gradually resolved into a fine Serum. Hence proceeds that Change of Colour observable in contused Parts, when the Attenuation and Dissipation of the extravasated Blood begins to happen. *Hippocrates*, in his Treatise *de Fracturis*, when speaking of a Fracture of the Os Calcis, takes particular Notice of this Circumstance; for he reckons it among the best Signs, and such as remove the Dread of a Relapse: "When Ecchymoses [*ἐκχυμώματα*] blackish Spots, and the Parts adjacent to them, assume a greenish Colour, without any Hardness; this, in every Ecchymosis, is the best and most salutary Sign."

But Contusions are rarely succeeded by violent Hæmorrhages, except in Cases where the Skin is divided by a pretty large Wound; for the Blood discharg'd from the ruptur'd Vessels, being collected in the Panniculus Adiposus, becomes grumous, and blocks up the Passage of the Blood, which would otherwise be discharg'd. But when the Viscera, or larger Vessels, are injured by a Contusion, a considerable Quantity of Blood may be pour'd into the Cavities of the Body; when, for Instance, the Liver is thus injur'd. But, in this Case, the Paleness of the Countenance, the Coldness of the Extremities, the preternatural Weakness, and the Syncope, sufficiently indicate such an internal Hæmorrhage. But when, in consequence of a violent Contusion, all the Vessels of any Part of the Body are so destroy'd, as totally to prevent the Influx and Efflux of the Humours in this Part, then a Gangrene, or a Mortification of the Part, is produced.

*Thirdly*, By comparing the Part affected with the Cause of the Injury.

When we are apprised, that a hard obtuse Body, put in Motion, has struck upon any Part of the Body; or, *vice versa*, that any Part of the Body, put in Motion, is dash'd against such a hard and obtuse Obstacle; we, from either of these Circumstances, know, that a Contusion is produced. Hence it happens, that Wounds are often accompanied with Contusions, unless when the wounding Instrument is sharp. The Nature and Situation of the Parts injured are carefully to be adverted to. Thus, for Instance, the Viscera of the Thorax are not so easily and readily injur'd by Contusions, as those of the Abdomen. Hence we understand;

*First*, That an internal and large Contusion of any of the more noble Viscera is incurable, and the frequent Cause of Diseases and Death.

For when the Vessels are ruptur'd, either a mortal Hæmorrhage, and such as cannot be stop'd, will ensue; or the contused Parts must, by a Suppuration, be separated from those which are sound, as *Hippocrates* observes in the Passage already mentioned. But from internal Suppurations of the Viscera, Consumptions frequently arise, which slowly destroy the Patient. Besides, since each of the Viscera contributes to the Preservation of perfect Health, after the Suppuration, the Functions of the injur'd Bowel will be so disorder'd, that Life may indeed possibly remain, but the Patient will continue in a miserable and morbid State of Health: But, since such Injuries frequently happen from Contusions, especially in the Liver and Spleen, on account of their tender and friable Nature, hence it is sufficiently obvious, that the worst Consequences are to be expected, that the Cure must be very difficult, and that it



is very rarely possible to restore the Patient to perfect Health; since, during the remaining Part of his Life, there almost always remains something of a scirrhus Nature, which will disturb the Functions of the injur'd Organ.

*Secondly*, That Contusions of the Bones are very dangerous, and difficult to cure; especially when they happen near the Joints; and when the Marrow is injur'd.

For when those Vessels are ruptur'd, which convey Life and Nourishment to the Laminæ of the Bone, these Laminæ will of course become mortified, and must be separated: But if such a Contusion should happen, especially about the Joints of the larger Bones, no Separation is to be expected; for in these Parts the bony Laminæ recede from each other, and form small Cells, in which there are numberless Blood-vessels, and others which contain a very fine and subtile Oil, which will, therefore, be destroy'd; and the extravasated Humour, stagnating, will become highly corrupted: Hence a Caries of the Bone is produced, and all the Train of Disorders, which can draw their Origin from it. But, if the Marrow itself is thus injur'd, an unhappy Change into a rancid Acrimony, a Corrosion of the Bone, and a Corruption of all the Parts which cover it, will necessarily ensue. Add to this, that the Bones cannot be contused about the Joints, but the Ligaments, which connect and join the articulated Bones, must at the same time be injured. Hence the most intense Pains, Anchyloses, and other Disorders, may arise.

*Thirdly*, That Contusions of the Cranium are worst of all, on account of the Vicinity of the Brain, as has been already explain'd under the Article CAPUT.

*Fourthly*, That Contusions of the larger Glands, as those near the Ears and Armpits, those in the Breasts, the Pancreas, the Groins, and Uterus, endanger a Scirrhus, a Cancer, and all their Consequences.

For, in all the Parts here enumerated, there are considerable Glands situated, from the Contusion of which, the most violent Disorders often proceed. Among ten Cases, where there are Scirrhuses and Cancers of the Breasts, nine of them, perhaps, arise from Contusions. Thus I saw, says *Van Swieten*, a miserable Woman, who had her Breast contused by her Daughter's Elbow, whilst, sleeping in the same Bed, she endeavour'd to turn herself, by leaning her whole Weight on her Mother's Breast. In a few Weeks the whole Breast became scirrhus, immensely large, and was at last seiz'd with a formidable Cancer: Disorders of the like Nature are observed to arise from Contusions about the Parotids, the axillary and inguinal Glands. The Uterus of such Women as are not with Child, is every-where sufficiently defended by the Bones of the Pelvis; for which Reason it cannot be easily contused. But, in pregnant Women, as the Bottom of the Uterus rises above the Os pubis, it may of consequence be easily injur'd by Contusions, as also by the imprudent Management of Midwives, or by difficult Labours; after which, Scirrhuses of the Uterus are so often observ'd to degenerate into cancerous Ulcers.

In the Cure of a Contusion, Resolution must be attempted; Suppuration must, if possible, be prevented; but much more a Gangrene.

Since, in Contusions, the solid Parts of the Body are mangled and ruptur'd, whilst at the same time the extravasated Fluids possess Interstices, in which they should not actually be; the Intentions of Cure must of course consist in removing the extravasated Humours, and uniting the solid Parts now separated. These Ends are most effectually answer'd by restoring a due Degree of Fluidity to the concreted Humours; for, by this means, being absorb'd by the bibulous Vessels, they will circulate with the rest of the Juices. This is call'd a Cure by Resolution. But a Suppuration is, if possible, to be prevented, since, by its Means, a great Part of the Substance of the contused Part is always destroy'd, whilst all that, in which the Circulation can no longer be carried on, is separated. Hence unseemly Scars often remain, and sometimes, after violent Suppurations, the cellular Membrane being consum'd, the Muscles and Tendons grow to the adjacent Parts; by which means their Use and Functions are disturb'd, and sometimes totally destroy'd. Though a Suppuration cannot always be prevented, yet 'tis certain, that, by the Application of the Remedies we shall afterwards specify, such Contusions may often be resolv'd, as without their Use, or with the too late Application of them, would have certainly ended in Suppurations. 'Tis sufficiently obvious, that a Gangrene is still more carefully to be guarded against, since, by its means, the vital Influx and Efflux of the Humours, into the Part affected, is totally prevented; and afterwards all the mortified Part must be separated, by Suppuration, from the live adjacent Parts.

Resolution is accomplish'd by removing the extravasated Liquids, without any farther Injury to the Vessels.

In all Contusions, a Removal of the extravasated Liquor is universally indicated as necessary; but, when by making an Incision in the contused Part, the extravasated Humours are evacuated, this cannot properly be call'd Resolution, since a new Injury is done to the Parts. This also holds true, when the Cure is accomplish'd by Suppuration; for, in this Case, the Ends of the injur'd Vessels are separated and discharged with the extravasated Humours in the Form of Pus. But, in order to produce a Cure by Resolution, 'tis necessary, that no farther Injury should be done to the Parts, whilst, at the same time, the extravasated Humours are removed. This is what *Hippocrates*, in his *Treatise de Articulis*, calls, *to dry and reabsorb the extravasated Blood*; for, when treating of those Disorders which follow Contusions of the Flesh about the Ribs, when not fractur'd, after he has prescrib'd proper Remedies, he adds, that proper Bandage is highly necessary, till the Ecchymosis is dry'd up and reabsorb'd, which is produced by the Rupture, *ὑλόμεται*.

This Resolution is brought about;

*First*, By rendering the extravasated Humours fluid.

The Blood, discharged from the Vessels, is immediately concreted, and becomes unfit both to circulate thro' the minute Blood-vessels, and to be reabsorb'd by the small Mouths of the Veins. The first Thing requisite is, therefore, to procure a due Degree of Fluidity to the concreted Humours; for, if these extravasated Juices can be reduced to the Fineness and Subtlety of Water, they will certainly be dissipated, provided the Constitution of the Patient is found in every other respect. *Hippocrates*, who acknowledg'd, that the whole Body was expirable and inspirable, in the sixth Book of his *Epidemics*, asserts, *that Flesh attracts the Fluids both from the Cavities of the Body, and from without*. Hence the bibulous Veins, 'diffused thro' all the Cavities of the Body, whether large or small, will reabsorb the extravasated Juices, provided they be only so attenuated, as to enter their small Orifices.

*Secondly*, by relaxing the adjacent Vessels.

The extravasated Fluids, when sufficiently attenuated, will be reabsorb'd; but, at the same time, they first enter the small and minute bibulous Veins, and are from thence convey'd into the larger Ramifications; for 'tis certain, from Experiments accurately made, that small Glass Tubes, whose Ends are immersed in any Fluid, attract that Fluid into their Cavities; and that it ascends higher in them, in proportion to the Narrowness of their Diameters, and according as they recline from a perpendicular to an horizontal Direction, but most of all, when their other Extremities are turn'd downwards; for then the Gravity of the Fluid assists that Force, by which it is drawn or attracted into these Tubes. The extravasated Humours, when previously attenuated, seem to enter the small Veins in the same manner, and by the same Laws. But such is the Structure of the Valves conspicuous in the smallest lymphatic Veins, that the Pressure of the Fluid retained by them by no means hinders the extravasated Liquor from being absorb'd. Flexible Tubes are the more easily fill'd, the less the Resistance made by their Sides is. Hence, in consequence of the Laxity of the adjacent Vessels, these small resorbent Tubes are enabled the more easily to convey the Fluid they have absorb'd to the largest Ramifications, which in this Case is necessary.

*Thirdly*, By procuring the Resorption of the extravasated Humours into the Vessels, by evacuating these Vessels, or by Frictions.

The Fluids, thus absorb'd by the minute venous Ducts, will the more easily be convey'd thro' the larger Ramifications, the smaller the Quantity of the Liquid, to be thus convey'd, is; provided the other Causes, promoting the Motion of the venous Blood, remain the same. The principal of these Causes are the Pulsation of the Arteries adjacent to the Veins, and muscular Motion; for the Muscles, during their Action, becoming turgid, the adjacent Veins are by that means compress'd, and the Blood contain'd in them of course propel'd to the Heart. If, therefore, the Quantity of Fluids to be moved is lessen'd, whilst, at the same time, the moving Causes remain equally strong, 'tis obvious, that the Veins must be proportionably sooner emptied, and consequently that the Fluid to be absorb'd must, with the greater Ease, enter the small Mouths of the minute bibulous Veins. This is confirm'd by Experience; for, when certain Men were travelling in the scorching Heat of the Sun, their Bodies became rough and squalid, their Mouths were parched, and they were tormented with a burning and insatiable Thirst; but, after the Use of the Bath, they were surpris'd to find their Thirst extinguish'd, their Mouths moisten'd, their whole Bodies soft, humid, and free from their former Roughness. This Instance is brought by *Galen*, in *Comment. in Lib. 6. Epidem. Hippocr.* in order to prove, that the whole Body is inspirable; for by violent Motion, in an intensely hot State of the Atmosphere, a large Quantity of Moisture is evaporated and exhaled



exhaled from the Body ; in consequence of which, being render'd dry, it greedily absorbs the Water contiguous to its external Surface. 'Tis probably for this Reason, that, after large Hæmorrhages, the Body is fill'd with aqueous Humours, since, in consequence of the Loss of Blood, the minute absorbent Veins can easily evacuate the Fluids they have imbib'd into the larger empty Veins. In the mean time, on account of the impair'd Strength, and diminish'd Heat of the Patient, this subtle aqueous Fluid is accumulated in the large, as well as the small, Cavities of the Body, which, according to *Hippocrates*, in the Passage already quoted, in a State of Health contain Air, but in a morbid State Ichor. Hence also a Reason may perhaps be assign'd, why dropical Patients, after an Extraction of the Waters by the Paracentesis, or any other Method, become afresh so suddenly tumid, tho' they abstain from drinking ; for tho' in the Cavities of a dropical Body there is a large Quantity of Water collected, yet the other Vessels collapse, and empty themselves. Hence the other Parts of the Body decrease, in proportion as the Abdomen is distended, in that Species of Dropsy call'd Ascites ; so that the Body must of course become more bibulous.

But Frictions, by the gentle Compression they produce, act principally upon the Veins, because these are furnished with weaker Coats than the Arteries : Hence the Veins are emptied. But because, in every Species of Friction, there is an alternate Pressure and Relaxation of the Parts, for this Reason the Veins, empty'd by this gentle Pressure, are immediately fill'd again : Hence, by Frictions, an Effect somewhat analogous to Evacuation is produced ; for, when the Veins are empty'd, an easy Access is procur'd to the Fluids absorb'd by the small Mouths of the bibulous Veins. Add to these Advantages, that by Friction the extravasated Blood is attenuated and resolv'd ; for if Blood, taken from the Vein of a sound Person, and concentered in the open Air, is triturated in a Glass Mortar, it is again resolved into a frothy Liquid of a redish Colour. Hence appears the singular Advantage of Frictions in the Cure of Contusions.

Bleed, therefore, plentifully ; soon after, exhibit a strong, but not inflammatory Purge ; let a penetrating, relaxing, and resolvent Fomentation be applied to the Part ; and let warm Frictions be used : Mean time internal Resolvents, Sudorifics, and Diuretics, are of considerable Service.

As for liberal Venesection, it is a Remedy of the utmost Importance in all Contusions, provided the Patient is furnish'd with sufficient Strength to bear it : Hence it ought not only to be boldly performed, but also carefully repeated, if the Condition of the Patient requires it ; for, by this means, a Fever will be prevented ; as also violent Inflammations, which, in this Case, are highly to be dreaded ; for, by Venesection, the thickest Part of the Fluids, that is, the red Blood, is remov'd, the Vessels empty'd, and an easy Access procur'd to the finer Fluids, to be absorb'd by them. When also the larger Veins are empty'd by Venesection, the small bibulous Veins can, with the greater Ease, convey the Humours they have absorb'd to the large venous Ramifications. Hence a more quick and speedy Dissipation of the extravasated Blood will be produced.

As for Purges which operate violently without producing any inflammatory Effects, 'tis shew'd under the Article *VULNUS*, that purgative Medicines not only evacuate those Substances which existed in the Body in the same State in which they are discharged, but also that they dissolve the sound Humours, and eliminate them by Stool. Hence *Erasistratus*, and his Followers, justly maintain'd, *That Purgations were Evacuations, accompany'd with a Corruption and Change of the Substances evacuated*. *Galen*, indeed, was of a different Opinion ; but the Sentiment of *Erasistratus* seems to be founded on Truth ; for, when Scammony is exhibited to a sound and healthy Man, it so resolves the laudable Juices into a fine and subtle Water, that they are copiously discharged by Stool ; and if the Use of this Medicine is frequently repeated, the whole Body is emaciated, the Vessels collapse, and an incredible Weakness is brought on. All these Circumstances sufficiently prove, that Humours, previously morbid, have not only been discharged, but also that the laudable Juices, resolved by the Force of the Medicine into a fetid Water, have been eliminated : By these Remedies, therefore, the Vessels are empty'd, and the Humours resolv'd, whilst, at the same time, the small Veins in every Part of the Body, whether internal or external, are rendered highly bibulous and open, as is obvious from the following beautiful Experiment, mentioned by *Simpson*. A young Man, labouring under a Fever, was seized with a Diarrhœa, and an uncommon Stupor of his Senses. As this Patient would drink nothing, tho' his whole Body was scorched with a feverish Heat, his Physician ordered his Feet to be immersed in moderately warm Water : After this Step was taken, a surprising Decrease of the Water was observed, and soon after it was impetuously discharged from the Anus, almost without any Change of Colour. Hence 'tis obvious, that by such Purgatives the Humours are resolv'd, the Vessels empty'd, and that Power,

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by which the bibulous Veins absorb the contiguous Humours, increased.

But it must, at the same time, be observed, that, in Cases of this Nature, those Purgatives are by no means proper, which operate by exciting a violent Commotion in the Fluids, such as Coloquintida, the Juice of Spurge, or Euphorbium, and some others of a like Nature : But those must be prescrib'd, which, tho' possessed of an highly efficacious resolvent Quality, yet produce their Effects without exciting any considerable Commotions, such as Scammony, Jalap, Sena-leaves, and some others ; the Formulas or Methods of preparing which, are these following.

*PURGES which operate powerfully, without producing inflammatory Effects.*

Take of Agaric, two Drams and an half ; and of Sal Polychrestus, one Scruple : Mix up for a Purge.

Or,

Take of the recent middle Rind of Elder or Dwarf-elder, one Ounce ; triturate it with a sufficient Quantity of Rain-water ; then boil, and express the Liquor, of which four Ounces are to be exhibited for a Dose.

Or,

Take the Emulsion of Jalap-root, prepared with Sugar, and describ'd under the Article *CAPUT*.

Or,

Take of Agaric, two Drams ; of Sena-leaves, three Drams ; of Mechoacan-root, one Dram ; and of Tamarinds, two Ounces. Cut and bruise these together, macerate them for half an Hour in Rain-water, then let them boil gently for half a Quarter of an Hour ; and, with every nine Ounces of the strain'd Decoction, mix of Sal Prunellæ, half a Dram ; of solutive Syrup of Roses with Sena, nine Drams. Of this Preparation let the Patient take one Ounce every Half-hour, till he is briskly purg'd.

*A PREPARATION, in lesser Bulk, answering the same Intention.*

Take of Syrian Scammony, thirteen Grains ; of diaphoretic Antimony, twenty Grains ; and of solutive Syrup of Roses with Sena, four Drams. With these Ingredients, sufficiently triturated, mix half an Ounce of the distil'd Water of Succory for a Draught.

As for penetrating, relaxing, and resolvent Fomentations, the extravasated Blood remains coagulated in the contus'd Part, under the Skin, which generally remains entire. This coagulated Blood is to be render'd fluid, but in such a manner as to prevent Putrefaction ; for when the coagulated Blood is expos'd to the open Air, it is, indeed, generally colliquated ; but, at the same time, it becomes putrid. Hence, in Fomentations prepared for this Intention, the Ingredients must not only be possessed of a resolvent Quality, but also of a peculiar Virtue, by means of which they resist every Degree of Putrefaction. Sal Ammoniac, or Sea Salt, dissolved in twenty times as much Water, adding a fourth Part of Wine, and an eighth Part of Vinegar, make a Fomentation of this Kind, which, when apply'd warm, answers all the before-mentioned Intentions ; for it relaxes by means of the Water, and the Vinegar and Wine are powerful Resolvents, whilst, at the same time, they resist and prevent every Kind of Putrefaction. The Urine of a sound and healthy Man, with the Addition of some Vinegar, is a Fomentation of the like Nature, by which the frequent Tumors, produc'd in the Heads of Children by Contusions, are successfully and happily resolved.

Several Simples, of a resolvent Quality, may also be infused in Water for this Purpose : Thus, for Instance,

Take of white Bryony-root, two Ounces ; of round Birthwort, one Ounce ; of the recent Leaves of Rue and Savin, each one Handful ; of the Flowers of Tansey, Chamomile, and Feverfew, each one Ounce ; and of recent Onions, six Ounces. Digest these for half an Hour in a close Vessel, with a pretty strong Heat ; then let them boil for a Moment ; then, with every twenty-five Ounces of the Liquor, strongly expressed thro' a Cloth, mix half an Ounce of the Meal of Linseed. After this let it boil a little again, and with the Whole of the Decoction, when cold, mix of Spiritus Vini Theriacalis, two Ounces ; and of Sal Ammoniac, one Ounce. Let this be applied by way of Fomentation, with Woollen Cloths.

This Intention may be also answered by Cataplasms and Plaisters ; Formulas of which are these following.



Take the Ingredients of the above-mentioned Fomentation, prepare them into a Cataplasm, and add, of the Meal of Linseed, a sufficient Quantity; of Galbanum, dissolv'd in the Yolk of an Egg, one Ounce; and of the Oil of Chamomile, an Ounce and an half.

*A PLAISTER for the same Purpose.*

Take of the Powder of Bryony-root, two Ounces; of the Flowers of Sulphur, one Ounce; of Ethiops Mineral, three Drams; of pure and well-dissolv'd Galbanum, four Ounces; of Melilot-plaister, nine Ounces; and of the Oil of Chamomile, a Quantity sufficient for forming all into a Plaister.

Besides these, the following Plaisters contribute to answer these Intentions.

|                          |  |
|--------------------------|--|
| Emplastrum de Galbano,   |  |
| ———— Baccis Lauri,       |  |
| ———— Betonica,           |  |
| ———— Cumino,             |  |
| ———— Cephalicum,         |  |
| ———— Diachyl. cum Gum.   |  |
| ———— Diaphoreticum,      |  |
| ———— Ischiadicum,        |  |
| ———— de Meliloto,        |  |
| ———— Mucilaginis,        |  |
| ———— Oxycroceum,         |  |
| ———— de Ranis,           |  |
| ———— Idem, cum Mercurio. |  |

Since these, by their viscid and tenacious Nature, strongly adhere to the Skin, they retain the highly subtil-exhaling Fluid, and, as it were, strike it back on the Part to which they are apply'd. Hence the Part affected is plac'd, as it were, in a Bath of its own Steams, the Vessels are relaxed, and the fragrant Qualities of the Aromatics, mix'd with these Plaisters, insinuate themselves into them, from which very happy Effects are frequently produced; for Fomentations are of small Service, unless they could be kept continually warm on the Part affected.

As for warm Frictions, if there is no Inflammation, nor considerable Pain, in the contused Part, moderate Frictions are of singular Service; for, by this gentle Agitation, the concentered Blood is attenuated and divided, by which means it is rendered fit for entering the small Mouths of the bibulous Veins. The Veins are at the same time evacuated; and hence the Motion of the absorb'd Fluids thro' the empty'd Veins is rendered easy, as we have already observ'd. Thus a certain Man had his whole Face so contus'd, that it was rais'd in a formidable and unseemly Tumor, which, however, was, by the Assistance of the above-mention'd Fomentations, and gentle Frictions, dissipated, without any Suppuration; and, which could scarce have been expected, his Face and Complexion were perfectly restor'd to their former State.

As for internal Resolvents, these are such Medicines as again reduce the coagulated Fluids into the Molecules, of which they originally consisted before Concretion. Among these the principal is warm Water, partly because, by diluting, it insinuates itself between the small concentered Masses, and partly because it is the Vehicle of other resolvent Medicines; with respect to which, see the Article STRICTURA. After Venesection, therefore, and the Use of such antiphlogistic Purgatives, as powerfully resolve without producing any violent Commotion, it is proper to exhibit large Quantities of Decoctions, in which there is a great deal of Water; and, at the same time, such Medicines are to be prescribed, as, by their gentle Stimulus, may a little increase the Action of the Vessels upon the Fluids, lest the languid Water should remain, and be accumulated in the Body: For this Purpose such Medicines as also resist Putrefaction should be chosen. For this Reason the Intention is best answered by Infusions of Germander, Rue, and Horehound, as also by Decoctions of the Five Roots, and of the three Species of Sanders, mixed with Nitre and Honey; for whilst, by drinking these warm, the Veins, which were before evacuated by Venesection, and the Use of Purgatives, are continually fill'd, and whilst Fomentations are constantly applied to the contused Part, and by Frictions their Efficacy deriv'd to the injur'd Part, all the Relief is afforded which can possibly be expected from Art. See the Article OBSTRUCTION. For, by this means, the warm Water, richly impregnated with the resolvent Quality of these Medicines, continually washes, as it were, the extravasated Juices, dilutes, resolves, and renders them fit for being absorb'd by the minute bibulous Veins. Thus all the extravasated Fluid is carry'd off without any additional Injury done to the Vessels, which, in this Case, is requisite. But since all these Remedies, taken in large Quantities, are again generally dissipated, and carry'd out of the Body, either by a Diaphoresis, or by Urine, hence these Remedies, according to different Regimens, are either sudorific or diuretic; for if the whole Body is placed in a

warm Atmosphere, as, for Instance, when the Patient lies in Bed closely covered up, a Diaphoresis will be excited by these Medicines; but if the Patient is placed in a somewhat cooler Air, a preternatural Discharge of Urine is generally excited by the Use of these Preparations.

The Order in which these are to be used; the Necessity of repeating them, and their respective Degrees of Strength, are to be regulated by the Consideration of what has been said above, and the Danger which is threaten'd.

In every Contusion all these Measures are not to be taken indiscriminately; for slight Contusions are easily cured with Fomentations of Urine, Salt, and Vinegar, or other Preparations of a like Nature. But where a violent Inflammation, a Suffocation, and a Gangrene, are dreaded, then all the above-mention'd Methods of Relief are to be used. We are, therefore, to begin with Venesection, which must be as liberal as the Strength of the Patient will allow. Then we are to exhibit these Purgatives, that by this means the Humours being resolved, and the Patient brought low, the Body may be render'd as far from a feverish and inflammatory State as possible. When, by the Application of these Remedies, the Tumor, Pain, and Inflammation, are neither remov'd nor lessen'd, they are boldly, and without any Hesitation, to be repeated, especially if the internal Parts of the Body are injured by the Contusion; for, in this Case, the most terrible Consequences are to be dreaded from a Suppuration; or, when such a Disorder is not thoroughly removed, an incurable Scirrhus may remain, and prove the fatal Source of a Cancer, and other dreadful Calamities: But when, by an Application of these Medicines, the Symptoms begin to be lessened, if the Hands can have Access to the Part affected, Friction is then the most effectual Remedy, but not before; for if the Parts, rendered tense by the extravasated Humours, are inflamed by Friction, especially of the severe Kind, they will soon be seized with a Gangrene.

Whilst these Methods are pursued, a very slender Regimen, and one which is opposite to Putrefaction, is requir'd.

For 'tis requisite, that the Humours should be as thoroughly diluted as they possibly can; and that the Patient should, indeed, be kept alive, but at the same time so low, that no Inflammation may be apprehended. And, since the extravasated Humours have a natural Tendency and Disposition to Putrefaction, we must chuse such Kinds of Aliments as resist this Depravation of the Juces. Hence Decoctions of Barley, Oats, Rye, Bread, and other Substances of a like Nature, as also Milk diluted with Water, boil'd Apples, and Summer Fruit, especially when ripe, are in this Case principally beneficial. Weak Flesh-broths, boil'd with Rye or Barley, with the Addition of a proper Quantity of Lemon-juice, are in like manner serviceable. Nor are we in the least to be afraid, that the Patient's Life cannot be sustain'd and supported by such weak and low Nourishment; for the human Body, when preserv'd in a State of Rest, is capable of being supported with the lightest and weakest Aliments. The Truth of this Boerhaave experienc'd in his own Constitution; for, when rack'd with the most violent rheumatic Pains, he liv'd upon Whey alone, for twelve Days; and, at the same time, his Habit remain'd sufficiently strong for performing muscular Motion, unless the intense Pain had prevented it. But when by Venesection, and the Use of Purgatives, the Body is previously weaken'd, it cannot act so powerfully upon the Aliments taken in, as to convert them to a Substance of a similar Nature with itself. Hence the Aliments will generally retain their own Nature, and incline to a spontaneous Depravation. But, because a Putrefaction of the extravasated Humours is to be dreaded, such Aliments are to be chosen, as have a natural and spontaneous Tendency to Acidity. For this very Reason, all Fleashes, Eggs, and Fishes, are carefully to be abstain'd from. All acid Substances and Aromatics would, in this Case, prove prejudicial, by increasing and accelerating the Circulation of the Fluids, which ought rather to be faint and languid. But, in every Disorder of this Kind, we are to have particular Regard to the Season of the Year; the Constitution of the Patient, whether sound or morbid; his Method of Life; and other Circumstances mentioned under the Article VULNUS.

If all these Cautions relating to Regimen, and the Aids afforded by Pharmacy and Surgery, are carefully observ'd, the Event will always be successful, provided the Disorder is curable. As for the numberless boasted Specifics against Contusions, we are not so implicitly to confide in them, as to commit the Cure to them alone. Most of them are, indeed, innocent, and, consequently, may be safely used; but, at the same time, we are by no means to neglect the efficacious Means of Relief above specify'd. Thus Helmont, in his *Ortus Medicinæ*, orders the Blood flowing from the amputated Testicles of the Goat, to be dried, and exhibited to such as have fallen from Eminences, with an Intention to dissipate the grumous



grumous and coagulated Blood produced by the Contusion : For this Purpose Sperma Ceti, and a Decoction of Madder, are recommended by others.

Sydenham relates, that Sperma Ceti, *Iris* Slate, and other Medicines which are esteem'd Specifics in Contusions, only mislead us, and retard the proper Methods required in these Cases; as will appear by trying how much more safely and expeditiously these Accidents may be cured by Bleeding and Purging alternately, without having recourse to those insignificant Remedies, which are generally given after the first Bleeding, or to raising a Sweat, which is usually continued during the Use of them, and heats the Parts, already disposed to an Inflammation, so much as to endanger the Life of the Patient without Necessity.

If the Contusion is so considerable, as not to admit of Resolution, and is so situated, as to admit of Assistance from manual Operation; Scarification, Aperture, and Suppuration, are to succeed the Methods of Cure above directed, which, mean time, are not to be discontinued. If the Disorder is already so violent, as to produce a Mortification, or so considerable, that intolerable Pains, Inflammations, Suppurations, Atrophies, Fevers, and Death, can certainly be foreseen, the Part affected is to be extirpated, if that is possible.

If the Disorder is so violent, that it is not to be expected the extravasated Humours should be removed, without any farther Injury done to the Vessels, the only Methods of Relief remaining are, provided the Hands can have Access to the Part affected, by an Aperture to procure a free Discharge to the extravasated Humours, by a gentle Suppuration to cleanse the Part, and reduce it to the State of a simple Wound; for, unless these Measures are taken, the extravasated Humours, by pressing upon the adjacent Vessels, may produce an Inflammation, or, which is still worse, a Suffocation of all vital Motion, that is, a Gangrene in the Part. But if the extravasated Humours are corrupted, Consequences of a still more formidable Nature may ensue. In a Case, therefore, of this Nature, the contused Part is either to be entirely laid open, or scarified in several Places, that the extravasated Humours may be freely discharged. Then the live subjacent Parts, being freed from this preternatural Pressure, will be separated, and expel all the Parts, which, by the Contusion, were so destroy'd, that the Juices could no longer circulate in them: But this Method is, in a particular Manner, to be taken, if a Set of formidable Symptoms are to be apprehended from the Inflammation or Corrosion of the adjacent Parts, as is observed under the Article CAPUT.

Nor, even in this Case, are we to neglect the Methods of Relief above enumerated; for, if there is a very violent Inflammation in the contused Part, instead of a benign Suppuration, a Gangrene would be produced: Hence Venesection, and the Use of antiphlogistic Purgatives, will, in this Case, be of singular Service; as also such Fomentations as resist every Degree of Putrefaction. It will, at the same time, be expedient to exhibit large Draughts of resolvent Decoctions, that the Parts of the corrupted Humours, or of the Pus generated from them, absorb'd by the bibulous Veins, and infecting the Mass of Blood, may be eliminated, and discharged from the Body, either by a Diaphoresis, or by Urine; for since 'tis obvious, from what has been said, that the extravasated Blood may be so attenuated as to be absorb'd by the bibulous Veins; so 'tis, in like manner, possible, that the Pus, or corrupted Ichor, may mix with this Blood, and produce a Cacoehymy of the worst Species: Hence, again, a formidable Train of Symptoms may ensue.

But if, in consequence of a violent Contusion, the larger Vessels are so injured, or the natural Structure of the Part so destroy'd, that the vital Juices can no longer circulate thro' it, a perfect Mortification is produced, and all the Parts will become corrupted. The only Measure to be taken, in this Case, is to extirpate the Part, and by that means preserve the Life of the Patient. This Misfortune is distinguish'd by the following Circumstances: If, for Instance, neither Heat nor Sensation remain in the contused Part, when profound Scarifications are made in it; and if, soon after, a Putrefaction happening, the Part sends forth a cadaverous Stench. In this Case, unless the Part affected is extirpated with all Expedition, the Sphacelus spreads, and puts a speedy Period to the Patient's Life. A Misfortune of this Nature happen'd to a skilful Coachman, when accustoming young Horses to the Harness; for the Horses, starting with uncommon Fury, threw their Manager from his Seat; and his Legs, happening to be intangled among the Wheels, were so miserably mangled and shatter'd, that neither Heat nor Sensation any longer remain'd in them; but, as he would not submit to an Amputation, which was absolutely necessary to the Preservation of his Life, he died on the fourth Day. This also holds true, if, in consequence of violent Contusions, the Bones are so fractured as to fly into small Splinters; for these, by pricking and stimulating the nervous Parts, may produce intense Pains, violent Inflammations, and the miserable

Train of Symptoms subsequent to them. Thus *La Motte*, in his *Traité complet de Chirurgie*, gives us an Account of a Man, who, by a Cask full of Wine, had his Right Hand so contused, that those Bones of the Metacarpus, which sustain the Ring Finger, the middle Finger, and the fore Finger, were totally shatter'd, together with the adjacent Muscles. A celebrated Surgeon told the Patient, that the only Method of Relief was placed in the Amputation of the Parts so mangled; and foretold, that the most terrible Symptoms would ensue, if this necessary Step was neglected. But the Patient would not submit to the Operation; and, tho' the most proper and efficacious Remedies were applied, yet, in two or three Days time, intense Pains, a violent Inflammation, and an immense Tumor, indicated a future Gangrene. But, upon the contused Parts being immediately extirpated, the Patient was happily cured. What incredible Effects, even in the most desperate Cases, may be produced by the Intrepidity of the Patient, and the Skill of the Surgeon, we learn from a Case related by the same Author. A certain Captain of a Man of War had his whole Arm, as far as the Humerus, so miserably contused by an unlucky Accident, that neither Heat nor Sensation remain'd in the Part: But tho' the Sphacelus had already spread beyond the Articulation of the Humerus, and the whole Arm was corrupted, and sent forth a cadaverous Stench; yet the Surgeon, animated by the Courage of his Patient, and confiding in his own Skill, prefer'd a dubious Remedy to certain Death, and amputated the Arm immediately below the Articulation. Then, assisting Nature by proper Remedies, he separated the rest of the corrupted Parts, and, in two Months time, the Patient was perfectly recover'd.

The Method of Cure, above specify'd, will perform more than could easily be expected; especially as Nature spontaneously assists, and that in a very remarkable Manner, in attenuating, resolving, dissipating, and expelling what is offensive to her.

We are not, however, even in the most desperate Cases, rashly to proceed to Extirpation; for unexceptionable Instances sufficiently inform us, that Disorders of this Kind, in all Appearance absolutely desperate, have been sometimes happily cured without it. For this Reason it always seems expedient previously to try the Method above directed, since it may be safely practised, and since there are Medicines known, by means of which the mortified Parts may be so preserved, that the Putrefaction will not readily diffuse and spread itself. Alliaria, Scordium, Horehound, Sage, and Rue, infused in Water, with an Addition of Salt, Vinegar, and Wine, or the Spirit of Wine, make a Fomentation, which, when constantly apply'd, infallibly prevents every Degree of Putrefaction. By the Use of this, the Surgeon may safely wait for some Days, to see whether Nature attempts any Separation, or whether the Signs of returning Life appear in the Part contused. Thus the celebrated *Boerhaave*, when speaking to his Pupils upon this Subject, used to tell them, that, by this Method, he cured a *German* of Distinction, who, by a Fall from his Chariot, had the Wheels driven over his Legs; by which means the Tibia and Fibula of them both were miserably shatter'd, and the adjacent Parts dilacerated in the most terrible Manner; and this Cure he completed, even after a Gangrene was begun in the Parts. *La Motte*, in his *Traité complet de la Chirurgie*, Tom. 3. gives us a memorable Instance of a young Man, the anterior Part of whose Right Cubit was so severely struck with a Cudgel, that a violent Contusion, accompanied with intense Pain, appear'd from the Elbow to the Carpus. The Patient applied, to the contused Part, Linen Cloths, dipt in Spirit of Wine; but, finding little or no Relief from these Applications, he consulted a Surgeon. When the Pain in the Hand was almost removed, but that about the Cubit augmented, the Hand became pale, and entirely cold; whilst, at the same time, the Skin, when roughly touch'd by the Points of the Fingers, came off. Upon the Surgeon's making deep Scarifications, with a Lancet, the Patient felt no Pain; and, even upon passing a Lancet entirely thro' the Hand, not a single Drop of Blood was discharged. This Coldness, and Want of Sensation, reach'd as far as the Middle of the Cubit. The Part was fomented with Spirit of Wine, impregnated with Salt, and the *Unguentum Ægyptiacum*. At the same time a Cataplasin was apply'd, composed of the Meal of Barley, Beans, and Lupins, with an Addition of Aromatics and Wine. By these Applications the Heat and Sensation of the Parts were restored, as far as the Carpus; whilst the Hand, in the mean time, remain'd cold, and destitute of Sensation; but, in five Days time, it neither became fetid nor blackish. Fresh Scarifications being made in the Hand, Oil of Turpentine was dropt into them. Thus the other Applications being continued for five Days more, all Things remain'd in the same State; but, at last, Heat and Life began insensibly to be restored, and the Patient was cured, without the Extirpation of the Part; but two of his Fingers remain'd contracted, and he could not move the rest, without some Difficulty. Since, therefore, in so de-

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perate a Cafe, the confuted Part was preserved, it seems to be the Duty of every prudent Surgeon never to have recourse to Extirpation, till all other Methods have been tried in vain; for if, by Venesection, and the other Methods proposed, the Impetus and Force of the Blood is so allay'd, that there is no Dread of an Inflammation or Gangrene from this Cause; if, at the same time, such external Applications are used as prevent Putrefaction; and if, in Conjunction with these, a slender Diet, and such as has not the least Tendency to Putrefaction, is prescribed, there is great Reason to hope, that the corrupted Parts may be separated from those which are alive, and that such as are destroy'd may grow again.

CONVALESCENTIA. A Recovery from Sicknefs.

CONVOLVULUS.

The Characters are,

The Leaves grow alternately on the Branches; the Stalks are generally scandent; the whole Plant usually abounds with a milky Juice; the Flower-cup in some is double, one, which is external, being bifoliated; the other, within this, is less, quinquefid, and tubulous; in others, the Flower-cup is single; the Flower is monopetalous, campaniform, and pentagonal, with expanded Edges; the Bottom of the Flower being often perforated with five Holes; and five Stamina, arising from the Bottom of the Flower, uniting in one Tube; the Ovary becomes a roundish membranaceous Fruit, inclosed in the Calix, and sending forth three Tubes, and divided generally into three Cells, seldom into four, and sometimes, but seldom, univascular. Convolvuli with a trailing or scandent Stalk.

1. Convolvulus; maritimus; nostras; rotundifolius. See BRASSICA MARINA.

2. Convolvulus; Syriacus; & Scammonea Syriaca. *Hist. Oxon.* 2. 12. *Tourn. Inst.* 83. *Elem. Bot.* 73. *Boerb. Ind. A.* 245. *Scammoneum*, Offic. *Scammoneum Syriacum*, Ger. 716. *Emac.* 866. *Scammonea Syriaca*, C. B. Pin. 294. *Raii Hist.* 1. 722. *Scammonea Syriaca legitima*, Park. *Theat.* 163. *Scammonea Syriaca, flore majore Convolvuli*, J. B. 2. 163. *Scammonea & Scammoneum*, Chab. 123. SCAMMONY.

The Plant which produces Scammony has a large thick Root, as big as a Man's Arm, having a slender hard Pith in the Middle: It is full of a white milky Juice. From this Root spring many slender climbing Stalks, which twine and wind about any thing in their Way, like our common great *Convolvulus*, or Bindweed, which it pretty much resembles, having Leaves like it, but more triangular. The Flowers too are much of their Shape and Colour, being white, and Bell-fashion'd, and are succeeded by roundish Seed-vessels, each containing three angular Seeds. It grows in Syria. The concreted Juice of the Root is the Scammony of the Shops, whereof the best comes from Aleppo; that which comes from Smyrna being fuller of Dross and Sand. See SCAMMONIUM.

3. Convolvulus; Canariensis; sempervirens; folio molli, incano; flore ex albo purpurascens. *H. A.* 2. 101. PERENNIAL CANARY BINDWEED, WITH SOFT HOARY LEAVES, AND WHITISH PURPLE FLOWERS.

4. Convolvulus; minor; arvensis; flore roseo. C. B. Pin. 294. *Tourn. Inst.* 83. *Elem. Bot.* 72. *Boerb. Ind. A.* 245. *Helxine cissampelos*, Offic. *Helxine cissampelos multis, sive Convolvulus minor*, J. B. 2. 157. *Convolvulus minor vulgaris*, Park. *Theat.* 171. *Mer. Pin.* 29. *Raii Hist.* 1. 725. *Synop.* 3. 275. *Convolvulus minor*, Merc. *Bot.* 1. 30. *Phyt. Brit.* 30. *Chomel.* 761. *Convolvulus vulgaris, flore minore purpurea*, *Hist. Oxon.* 2. 13. *Convolvulus minor; fassons veterum; Helxine cissampelos*, Chab. 121. *Smilax levis minor*, Ger. 712. *Emac.* 861. SMALL BINDWEED.

It grows in Fields, and flowers in June. The Herb is used. The Juice of the Leaves, taken internally, are cathartic.

I know not whether this Plant be purgative, as several Persons affirm; but I know, from the Experience of our Peasants of Provence, that, being externally apply'd, it is a good Vulnerary. *Tournefort. Histoire des Plantes*, &c.

5. Eadem (4.); flore albo.

6. Eadem (4.); flore purpureo.

7. Eadem (4.); flore ex albo & roseo variegato.

8. Convolvulus; vulgaris; major; albus. *Hist. Oxon.* 2. 12. *Boerb. Ind. A.* 246. *Smilax levis*, Offic. *Smilax levis, Convolvulus major*, Chab. 121. *Smilax levis sive levis major*, Ger. 712. *Emac.* 861. *Convolvulus major*, J. B. 2. 154. *Raii Hist.* 1. 725. *Synop.* 3. 275. *Convolvulus major albus*, C. B. Pin. 294. *Park. Theat.* 163. *Tourn. Inst.* 82. *Elem. Bot.* 72. *Mer. Pin.* 28. *Convolvulus major flore albo*, Merc. *Bot.* 1. 30. *Phyt. Brit.* 30. *Scammoneum Germanicum*, Hoffm. *Cat. Aldorff.* GREAT BINDWEED.

The Root of the great Bindweed is long, slender, and creeping, with small Fibres at every Joint, when broken, yielding a thin Milk: The Stalks are long, slender, and frequently contorted, twisted together, climbing and ramping upon any thing in its Way, and running to a great Length. The Leaves grow alternately on pretty long Foot-stalks, large, and smooth, hollow'd in, and Heart-fashion'd next the Stalk, with two

sharp Ears, ending gradually in a sharp Point: Among these, toward the Tops of the Branches, come forth, singly, large white Bell-fashion'd Flowers, with the Brims somewhat turn'd outward, growing in a Calyx of five small Leaves, set in a Covering made of two more. The Seed-vessel is roundish, containing several blackish angular Seeds. It grows everywhere in the Hedges, flowering all the latter Part of the Summer. *Miller's Bot. Off.*

It grows about Hedges, and in Gardens, and flowers in the Summer. The Root, the Herb, and the Water distil'd from it, are kept in the Shops at Hall in Germany, according to Dale. This Plant has the Reputation of purging off bilious, acrid, and serous Humours. The Root is cathartic; whence it is call'd, by Hoffman, German Scammony. The Women use a Decoction of this Plant as a Preservative against Miscarriages, with an Intent to allay wandering Pains, and to prevent any sudden Frights from affecting them. *Prevotius*, in his *Medicina Pauperum*, recommends a Decoction of this Plant as a mild Evacuant of Bile.

9. Convolvulus; vulgaris; major; flore ex roseo & albo variegato.

10. Convolvulus; Indicus; flore violaceo. *H. Eyst. Æst.* 6. 13. *P. 8. F. 2.* *Campanula Indica*. J. B. 2. 165. a.

11. Convolvulus; Indicus; flore albo. *H. R. Par.* a. INDIAN BINDWEED, WITH WHITE FLOWERS.

12. Convolvulus; Indicus; flore albo purpurascens; semine albo. *H. R. Monsp.* a. INDIAN BINDWEED, WITH WHITISH PURPLE FLOWERS, AND WHITE SEEDS.

13. Convolvulus; cœruleus; hederaceus; seu trifolius. *Park. M. H.* 2. 13. *Nil Arabum, sive Convolvulus cœruleus*. J. B. 2. 164. *Nil Arabum Camerarii*. *H. Eyst. Æst.* 6. 13. *F. 8. F. 3.* IVY-LEAVED INDIAN BINDWEED, WITH FAIR BLUE FLOWERS.

14. Convolvulus; folio anguriæ; flore exiguo, carneo.

15. Convolvulus; Africanus; minor; flore albo, minimo. *Volk. H. Mauroc.* 56.

16. Convolvulus; argenteus; folio Althææ. C. B. P. 295. *M. H.* 2. 13.

17. Convolvulus; argenteus; Althææ foliis magis incisif & incanis. *H. L.*

18. Convolvulus; Orientalis; folio crasso, magno, ad pedunculum exciso; flore amplo, subcœruleo. *Sher. H.*

19. Convolvulus; Græcus; Sagittæ foliis; flore albo. *T. C. I.*

Convolvuli with a Stalk, little, or not at all, scandent.

1. Convolvulus; Lusitanicus; flore cyaneo. *Brass.* Convolvulus; peregrinus; cœruleus; folio oblongo; flore peramœno triplici colore insignito. *M. H.* 2. 17. *Campanula exotica*, Aldin. 88. PORTUGAL BINDWEED, WITH FINE BLUE FLOWERS, VULGARLY CALL'D CONVULVULUS MINOR.

2. Idem (1.); flore, & semine, albo. a. PORTUGAL BINDWEED, WITH WHITE FLOWERS AND SEEDS, VULGARLY CALL'D CONVULVULUS MINOR FLORE ALBO.

3. Idem (1.); flore cyaneo. a.

4. Convolvulus; Siculus; annuus; cœruleus; minimus; capsulâ floris binis foliolis cinctâ. *M. H.* 2. 36.

5. Convolvulus; major; rectus; Creticus argenteus. *Hist. Oxon.* 2. 11. *Boerb. Ind. A.* 247. CNEORON ALBUM, DORYCNIUM, Offic. *Cneoron album folio Olea argenteo molli*, C. B. Pin. 463. *Cneoron album foliis argenteis*, Ger. *Emac.* 1598. Chab. 47. *Dorycnium*, Alpin. *Exot.* 73. *Dorycnium Imperati*, J. B. *Dorycnium Creticum Alpini*, Park. *Theat.* 361. *Dorienio D'Alcuni overo Convolvulo recto di Candia*, Pon. Bal. Ital. 131. *Convolvulus rectus odoratus Ponæ*, *Raii Hist.* 1. 731. *Convolvulus argenteus umbellatus erectus*, *Elem. Bot.* 73. *Tourn. Inst.* 84. ROCK ROSE.

It grows in Crete, where it flowers in June. I know of no medicinal Virtues attributed to it.

6. Convolvulus; argenteus; minor, repens; Rupellensis; flore rubro. *M. H.* 2. 17. *Id. est. Sect.* 1. *T.* 4. *No.* 2.

7. Convolvulus; linariæ folio; affurgens. See CANTABRICA.

8. Convolvulus; folio linariæ; humilior. *T.* 84. *Cantabrica quorundam*. Clus. II. 49. H.

9. Convolvulus; ramosus; incanus; foliis Pilosellæ. C. B. P. 294. *Cissampela ramosa di Candia*. Pon. Bald. Ital. 16. H. *Boerhaave's Ind. alt. Plant.* Vol. 1.

Dale reckons the Jalap, Mechoacan, and Turbith, amongst the Species of CONVULVULUS. See these under their respective Articles.

CONUS, κώνος. This is a Word used by Mathematicians, among whom it signifies, a Figure generated by the Circumvolution of a Triangle about one of its Sides. From Geometry, the Word *Conus* has been borrowed by Botanists; among whom it imports such a Fruit as arises from a broad circular Base, terminates in a Point or Apex, and is composed of a compact Congeries of woody Layers. Trees, bearing Fruit



Fruit of this Kind, are call'd coniferous Trees; such as the Pine, the Fir, and the Larch-tree. And though, according to *Salmasius*, in his *Exercitationes Plinianæ*, that Fruit is only a Cone, which gradually arises from a round Base to an Apex or Point; yet those Trees, whose Fruits are squamous, are also reckon'd among the coniferous Trees, though they do not resemble a Cone, such as the Cypress, the Elder, the Thuya, the Birch-tree; for, according to *Gæfalinus, de Plantis, L. 3. C. 52.* "it is sufficient to give them this Denomination, that they be as a compact squamous Fruit, under every Layer of which, Seeds are contained." Hence *Ray*, in his *Methodus Plantarum Emendata*, uses the following Words: "Cones, says he, are these squamous, hard, and dry Fruits, wreath'd up in the Form of a Cone or Pyramid, and, for the most part, containing two Seeds under each Layer. Under this Name I also comprehend those Fruits, which consist of several crustaceous or woody Parts, closely join'd together, and gaping when the Fruit is ripe; such as the Fruit of the Cypress-tree." *Ludwig*, in his *Aphorismi Botanici*, has an Eye, not only to the Figure, but to the Layers of the Fruit, when he defines a Cone, *A Series of Layers adhering to a common Axis, and containing Seeds in their several Interstices.* Coniferous Trees are commonly said to be Proof against Corruption, Rottenness, and the Impressions of Time. *Bodæus* in *Theophrast.* accounts for this Phænomenon, from the pinguious Substance, with which they abound; which not only suffocates all Insects, but also conglutinates and fills up the Cavities of the Wood, as it were, with a kind of Bitumen, which hinders the Air from entering its Pores, and corrupting its internal Parts. *Bodin*, in his *Universæ Naturæ Theatrum*, declares himself of the same Opinion. But I would have this Assertion understood with some Restriction, lest the Hyperbole should be carried too far, to the Disadvantage of Truth; since no more can be justly asserted, than that those coniferous Trees, whose Wood is most compact and solid, are least subject to Rottenness and Putrefaction. Besides, 'tis not improbable, that from recent coniferous Trees Insects are banished, by the pinguious and bitter Juice they contain. *Theophrastus*, in his *Hist. Plant. L. 2. Cap. 2.* has determined, that all coniferous Trees, in general, arise from a Seed; and *Bodæus*, in his Commentary on this Passage, confirms this Sentiment in the following Words: "I have often attempted to rear coniferous Trees by setting a Twig or Branch, but I always lost my Labour; for they never budded; and, if coniferous Trees are transplanted, they generally decay and perish: But," says he, in another Passage, "whoever has a Mind to transplant these Trees, must carefully observe what particular Parts of them are turn'd to the South, and what to the West; for if that Part of the Tree, which before fac'd to the West, is, upon Transplantation, turn'd to the South, the Tree fades and dies."

Besides these Significations of the Word *Conus*, it occurs in another Sense in *Dioscorides, L. 1. C. 78.* where he says, that liquid Pitch is by some call'd *κων*. *Bodæus* suspects this Word, and thinks that nothing more is meant by it, than the Fruit of the Pine, and the Pitch-tree. *Saracenus* also confesses, that the Word *κων* is scarce any-where else used for liquid Pitch. *Κων*, however, seems to him to be deduced from it. Hence *κωνισαί*, which *Hesychius* interprets *πταροκοπίσαι*, which is, to bedawb with Pitch.

**CONUS FUSORIUS.** This is also call'd *Pyramis*, and is what we call a Cone. It is a Vessel, whose Figure resembles that of an inverted Cone. It is made either of Brass or Iron, and is intended for separating Reguluses from their respective Scorix; for whilst the fus'd Mineral is pouring into the Crucible, it is struck with a Mallet, in order to produce a tremulous Motion in it; by which means the heavier Parts fall to the Bottom, and those which are lighter, such as the Scorix, float on the Surface.

**CONVULSIO.** A Convulsion, or involuntary Contraction, of the Muscles. See **SPASMOS.**

For an Account of Convulsions, as Symptoms of Fevers, see **FEBRIS**; as Symptoms of Wounds, see **VULNUS.**

**CONVULSIVUS.** Convulsive. Spasmodic.

**CONYZA.**

The Characters are,

It hath undivided Leaves, which, for the most part, are glutinous, and have a strong Scent: The Cup of the Flower is, for the most part, scaly, and of a cylindrical Form: The Flower is composed of many Florets, which are succeeded by Seeds, which have a downy Substance adhering to them.

*Boerhaave* mentions ten Species of this Plant; which are,

1. *Conyza*; latifolia; viscosa; suaveolens; flore aureo; ex Gallo-provincia. *T. 445. M. H. 3. 113. Eupatoria, conyzoides, maxima, Canadensis, foliis caulem amplexantibus.* Pluknot. Phyt. 87. 4. b. H.

2. *Conyza*; major, vulgaris. See **BACCHARIS.**

3. *Conyza*; cærulea; acris. *C. B. 265. Raii Hist. 1. 270. Synop. 80. Ger. Emac. 484. Hist. Oxon. 3. 315. Boerb. Vol. II.*

*Ind. A. 116. Conyza, Offic. Germ. Conyza odorata cærulea? Park. 126. Conyzoides, Dill. Cat. 154. Senecio fœve Erigeron cæruleus, aliis, Conyza cærulea, J. B. 2. 1043. Senecio cæruleus, Chab. 325. Aster arvensis cæruleus acris, Tourn. Inst. 481. Buxb. 30. BLUE FLEABANE.*

It grows in barren Pastures, and flowers in July or August. This Herb is said to accelerate Suppuration.

4. *Conyza*; mas; Theophrasti; major Dioscoridis. *C. B. 265. Boerb. Ind. A. 116. Conyza major, Offic. Ger. Emac. 481. Raii Hist. 1. 261. Conyza major vera, Hist. Oxon. 3. 114. Conyza major verior Dioscoridis, Park. 125. Conyza major Monspeliensis odorata, J. B. 2. 1053. Conyza Pulicaria, Chab. 327. Virga aurea major foliis glutinosi, & graveolentibus. Tourn. Inst. 484. GREATER FLEABANE.*

It grows in Italy, and other Places, near the Highways; where it flowers in July and August. The Fume of the Leaves, when burn'd, is said to drive away Gnats, Fleas, and other troublesome Insects.

5. *Conyza*; aquatica; laciniata. *C. B. P. 266. Aster palustris, laciniatus, luteus. T. 483. Jacobæa aquatica; elatior, foliis magis dissectis. M. H. 3. 110. a.*

6. *Conyza*; Cretica; fruticosa; folio molli, candidissimo, & tomentoso. *T. Cor. 33. H. SHRUBBY FLEABANE FROM CRETE, WITH SOFT, DOWNY, WHITE LEAVES.*

7. *Conyza*; Africana; tenuifolia; subfrutescens; flore aureo. *H.*

8. *Conyza*; Sicula; annua; lutea; foliis atroviridibus; caule rubente. *Bocc. M. H. 3. 115.*

9. *Conyza*; minor; flore globofo. *C. B. 266. Boerb. Ind. A. 116. CONYZA PULICARIA. Offic. Conyza minor, Raii Hist. 1. 262. Synop. 79. Schw. 56. Conyza minima. Ger. Emac. 482. Conyza media species, flore vix radiato. J. B. 2. 1050. Chab. 328. Aster Palustris parvo flore globofo. Tourn. Inst. 483. Aster parvus palustris, parvo flore globofo. Dill. Cat. 160. Chrysanthemum Conyzoides palustre minus flore globofo. Hist. Oxon. 3. 19. SMALL FLEABANE.*

This is a small low Plant, seldom growing above a Span high, with many hard reddish-brown Stalks, set with narrow, round-pointed, somewhat woolly Leaves, scarce an Inch long, and not a Quarter of an Inch broad, set on without Foot-stalks; on the Tops of the Branches grow many small, round, yellow Flowers, made only of a Thrum, without any yellow Petala, or Border, about them; the Root is small, woody, and perishing yearly; it grows in moist Places, and where Water has stood all the Winter, and flowers in August and September.

This is the *Pulicaria* of *Lobel*; and so call'd, because, by its Smell, it drives away and destroys Fleas and Gnats: Tho' the larger Sort, or the *Conyza media*, which is taller, thicker set with sharper-pointed Leaves, and bearing at the Top larger Flowers, having a yellow Border of Petala, about a broad Thrum, of the same Colour, has a stronger Scent, and, by *Gerard*, and *Parkinson*, and other Authors, is accounted to be of more Force and Virtue than the former. An Ointment, made with this, is likewise commended by some for the Itch. *Miller's Bot. Off.*

10. *Conyza*; Americana; lamii folio. *T. 455. Eupatorium, senecionis facie, folio Lamii. Par. Bat. a. AMERICAN FLEABANE, WITH LEAVES OF THE DEAD-NETTLE. Boerb. Ind. Alt. Vol. 1.*

Besides the preceding Species of the *Conyza*, *Dale* mentions the two following; which are,

1. **CONYZA MEDIA.** *Offic. Ger. Emac. 482. Raii Hist. 1. 262. Synop. 79. Schw. 55. Conyza media Asteris flore luteo, vel tertia Dioscoridis, C. B. 265. Hist. Oxon. 3. 113. Conyza media Matthioli, flore magno luteo, humidis locis proveniens. J. B. 2. 1050. Chab. 327. (cujus Fig. est transposita) Herba Dysenterica, Cat. Altdorf. Delis Sylv. Aster pratensis autumnalis Conyza folio. El. Bot. 384. Tourn. Inst. 482. Buxb. 29. COMMON FLEABANE.*

It grows in moist and watery Places, and flowers in July and August. Some prepare an Ointment of the Root and Leaves of this Plant, which is recommended for the Itch. The Leaves, taken with red Wine, are said to be good against a Dysentery, and Jaundice; to be effectual in promoting the Menses, and curing a Strangury. A Decoction of the Herb has the Reputation of being diuretic. *Dale.*

2. **CONYZA MINOR VERA.** *Offic. Ger. Emac. 481. Raii Hist. 1. 261. Hist. Oxon. 3. 114. J. B. 2. 1054. Chab. 328. Conyza minor vera Penæ. Park. 127. Conyza femina Theophrasti, minor Dioscoridis. C. B. 265. Virga aurea minor foliis glutinosi & graveolentibus. Tourn. Inst. 484. SMALL TRUE FLEABANE.*

It agrees in Virtues with the fourth Species.

*Dioscorides* attributes the following Virtues to the *Conyza*. The Plant, with the Leaves strewed, or used by way of Fumigation, drives away venomous Insects and Gnats, and kills Fleas. The Leaves are effectually apply'd to the Bites of



Serpents, Tubercles, and Wounds. The Flowers, with the Leaves, are drank in Wine, in order to provoke the Menfes, and expel the dead Fœtus [*εμπεύων*]; and also for the Strangury, Gripes, and yellow Jaundice; the same, drank in Vinegar, help the Epilepsy. The Decoction, used by way of Infusion, cures Disorders of the Uterus, and promotes a Discharge of the Menfes; but the Juice, in a Pessary, causes Abortion. The Herb, used with Oil, cures a Rigor, if the Part affected be anointed with it; and the small Species is effectually apply'd in Cataplasms for the Cephalalgia, or Head-ach.

The same Author describes three Species of the Conyza: The first, he says, is call'd the small Conyza, which is the most fragrant, or sweet-scented; the second is higher than an ordinary Shrub, and has larger Leaves than the former, and a strong Smell; the third Species has a thicker and softer Stem, and Leaves of a middle Size, between those of the larger and smaller Species, and of a very strong and unpleasant Smell.

CONYZOIDES. The third Species of *Conyza*, mentioned above, under the Title of *Conyza*; *caerulea*; *acris*.

COOPERTIO. A Covering of any Kind, as Clothes, for Instance. The Membranes of the Fœtus, the Uterus, and the Belly, are sometimes call'd by this Appellation, relative to the Fœtus.

COOPERTORIUM. A Name for the Thyroide Cartilage, according to *Castellus*.

COOSTRUM. The middle Part of the Diaphragm. *Rulandus*.

COPAIBA. Balsam of Capivi. See BALSAMUM.

That Balsam of Capivi is esteem'd genuine, which, when a small Drop of it is taken up on the Point of a Needle, and let fall into cold Water, sinks to the Bottom, or is suspended in the Middle of it, without altering its Figure. That, on the contrary, which floats on the Surface, expands itself, and is dissolv'd, is esteem'd spurious. This Balsam is frequently adulterated, by a Mixture of less valuable Oils; or it is counterfeited by mixing the distill'd Oil of Turpentine with express'd Oil of sweet Almonds; and the finest and fresh Turpentine of the *Larix* is sold for it: So that it is not very easy to procure the Genuine.

The external Application of this Balsam is of singular Efficacy in consolidating all Wounds, except those of the Gun-shot Kind. This Balsam is to be dropt, as hot as the Patient can bear it, into recent Wounds, after expressing out the Blood, which flows spontaneously. The Lips of the Wound, and the adjacent Parts, are also to be anointed with it. Then bringing the Lips into Contact, a Pledget, dipt in this Balsam, is to be apply'd, and secur'd with proper Compress and Bandage. In this State the Wound is to be left for twenty-four Hours; after which, the Compress and Bandage is to be removed; and if the Pledget should adhere to the Wound, it is not to be taken off, but a few Drops of the warm Balsam are to be pour'd upon it every twenty-four Hours, till it fall away spontaneously. According to *Ettmuller*, "When used externally, it is a more valuable vulnerary Medicine than Peruvian Balsam; and in twenty-four Hours time conglutinates Wounds, except very large, without leaving any unseemly Scar, as the *Dutch* often find from Experience." It is apply'd warm, upon Cotton, to Excoriations of the Anus. But this Piece of Practice must not be used, where the Redness of the Parts indicates an Inflammation, or where the Humours of the Patient abound with Acrimony; for, in both these Cases, the Inflammation would be increas'd, and a Gangrene endanger'd. In *Cailus's Histoire Naturelle du Cacao*, it is ordered to be applied warm upon a linen Cloth, in the first Assaults of the Gout, in Rheumatisms, and in sciatic Pains. When internally used, it also produces the Effects of vulnerary Medicines, and is recommended in all Hæmorrhages arising from a Rupture of the Vessels; such as an Hæmoptysis, for Instance, or a Spitting of Blood. In bloody Fluxes, an Ounce of it is to be mix'd with an anodyne Clyster, which is to be retain'd as long as possible. It is also a celebrated Medicine in scorbutic and rancid Cachexies, where the Humours have a Tendency to Putrefaction; as also in a Gonorrhœa, a Fluor Albus, and in Cases where the Intention is to purge the Kidneys from Sand and Gravel; for it provokes Urine, extinguishes the Heat attending its Discharge, and effectually carries off its bloody, loathsome, and purulent Contents. It does not, like most other Balsams, give the Urine a Smell like that of Violets, but it communicates to it a manifestly bitter Taste, and surprisingly destroys the muriatic Saltiness, not only of the Urine, but also of the Serum, Blood, and Saliva. *Ettmuller* informs us, that it is successfully exhibited in Diarrhœas; and more particularly in a Cholera, and Dysenteries arising from an Acrimony of the Humours. It is said to be a highly powerful and efficacious Medicine for Disorders of the Thorax; because it deterges the Bronchia, procures a due Tone and Soundness to the Lungs, and, perhaps, dissolves crude Tubercles; for dangerous Coughs, and such as palpably threaten'd a Phthisis, have been observ'd to be thoroughly cured by it alone. Though it is intensely bitter, and evidently hot, yet

it proves beneficial to hectic Patients, because it powerfully corrects the Saltiness and Acrimony of their Juices, and at the same time destroys the putrid Taint, with which they are infected. The Dose of this Balsam is generally from five to fifteen Grains; but when two or three Drams of it are exhibited in the Form of a Potion, it proves as purgative as Turpentine. The most commodious Methods of exhibiting it are either in the Form of Pills, made up with powder Sugar, or dissolv'd with the Yolk of an Egg, or mix'd with warm Milk. It may be exhibited twice a Day. Mr. *Labat* extols it as an efficacious Remedy against intermitting Fevers, if five or six Drops of it are exhibited in about an Ounce and an half of Flesh-broth, a little before the Paroxysm. But, for the Cure of continued Fevers, it is to be exhibited in the same Form two Hours before Meals. He tells us, that this Dose must be repeated twice in twenty-four Hours; and affirms, that it insensibly produces the desir'd Effect, without either promoting a Discharge of the Urine, or exciting a Diaphoresis. *Ettmuller* highly extols this Balsam, as an uncommon Specific in Gonorrhœas, when exhibited in warm Milk; and adds, "This Medicine was much used by *Sylvius* and *Lindanus*, who every Morning exhibited five or six Drops of it in Spanish Wine. These Physicians, not only in a simple, but also in a virulent Gonorrhœa, prescrib'd this Balsam, in Conjunction with Mercurius Dulcis, with uncommon Success." *Carolus de Maets*, in his *Chymia Rationalis*, endeavours to confirm this specific Virtue of the Balsam of Capivi; and, under the Name of Elixir Antivenereum, prepares from it the following Medicine against a Gonorrhœa, the Lues Venerea, and nephritic Disorders.

Take of Alcohol of Wine, five Ounces; of the best Gum Guajacum, two Drams; of the recent Oil of Sassafras-wood, half a Dram; and of Balsam of Capivi, one Ounce: Let these be digested together for twenty-four Hours, with the Addition of a small Quantity of the Salt of Tartar.

He says this Medicine operates by a Diaphoresis, and is proper in all Disorders to be cured by producing that Effect. The Dose of it is from three Drops to one Scruple, in some proper Liquor; such as a Decoction of Guajacum, for Instance, in a Lues Venerea. *Quincy* orders forty Drops for a Dose. Our Countryman, *Turner*, in the Cure of a Gonorrhœa, prefers Balsam of Capivi to Turpentine, and the other native Balsams generally prescribed against this Disorder; such as those of *Peru*, *Tolu*, and *Gilead*. After the Use of proper Purgatives, this Author, in order to complete the Cure, prescribes about an Ounce of it to be distributed into several Doses, and exhibited, either in the Form of an Electuary, with Conserve of Hips, or in the Form of a white Paste, prepared with white Sugar. The Bulk of a Nutmeg of either of these Preparations is to be taken, every Morning and Evening, upon an empty Stomach.

Notwithstanding the large Encomiums bestow'd on the Balsam of Capivi by Authors, 'tis necessary the young Practitioner should not be hurried away by their Authority, or implicitly rely upon their Words, without any Limitation or Restriction; for these happy Effects are only produced by this Balsam, when it is genuine and unadulterated; when it is exhibited at a proper Time, in a due Manner, in a just Quantity, and by the Directions of a judicious Physician: For when too large Doses of it are exhibited; when the Use of it is too long persisted in; or when it is administered at an unseasonable Time; by its acrid and balsamic Sulphur, it stimulates the delicate and sensible Coats of the Primæ Viæ, throws the Humours into Commotions, and, by that means, produces Fevers, Head-achs, Palpitations of the Heart, Pains and preternatural Heats of the Intestines, together with several other Disorders. But the Abuse of this Balsam is, in a particular Manner, prejudicial to Patients who labour under a Phthisis, or Ulcers of the Kidneys; since, in these Cases, it generally exasperates the Cough, brings on an Hæmoptoe, produces a Discharge of bloody Urine, and increases the slow Fever: When exhibited too frequently, or in too large Doses, to nephritic Patients, it increases the Pains and Inflammations of the Kidneys. "I have frequently, says *Rieger*, observ'd, that this Balsam, exhibited internally, or used in Clysters, to such as labour under malignant Dysenteries, or spurious Lienteries, arising from an Abrasion of the nervous Coats of the Stomach and Intestines, has excited preternatural and internal Heats. In all Fluxes, therefore, arising from the Acrimony of the Humours collected in the Primæ Viæ, and accompanied with a violent Inflammation of the Intestines, the Balsam of Capivi is more hurtful than beneficial. It is also prejudicial in Discharges of bloody Urine and Dysenteries in old People; because it throws the Blood into a Commotion, and more powerfully stimulates the urinary Passages already too much afflicted. Nor is the external Use of this Balsam always proper; because when applied to Wounds or Ulcers, as yet not sufficiently de-



terg'd, or freed from their Pus, it induces a Cicatrix too speedily, and by that means frequently brings on sinuous Ulcers, which soon after break out afresh, and are not to be cured without the greatest Difficulty. *Rieger.*

#### COPAL GUMMI.

*Refina Copal*, Offic. Schrod. Phyt. 193. *Jonf. Dend.* 357. *Raii Hist.* 2. 1846. *Copal*, J. B. 1. 325. *Chab.* 70. C. B. Pin. 504. *Mont. Exot.* 11. *Gummi Copal*, Park. *Theat.* 1670. *Ind. Med.* 40. *Copalli quahvith palahoca*, sive *Arbor Copallifera latifolia*, sive II. *Hern.* 46. *Rhus Virginianum lentisci foliis*, *Raii Hist.* p. 1799. *Rhoi Obscuriorum similis Americana*, *Gummi candidum fundens, non serrata, foliorum Rachi medio alata*, *Pluk. Almag.* 318. *Phytog.* Tab. 56.

This is a Gum or Resin of a yellowish-white Colour, not very hard, something like the common Frankincense, but in smaller Pieces, and of a much pleasanter Smell. It is brought from the *Spanish West-Indies*, being by our latest Writers thought to be the Gum of the *Virginia Sumach*, or a Tree very near akin to it; *Dr. Plukenet* having, as he says, gathered a Gum from that Tree very like *Gum Copal*.

This Gum is accounted a Cephalic, and good for the Palsy, and other Weaknesses of the Nerves; but it is not much used. What we in *England* call *Gum Copal*, is call'd *Gum Anime* in foreign Parts; and, on the contrary, what they call *Gum Anime*, we call *Copal*. *Miller's Bot. Off.*

The Natives of *America* give the Name of *Copal* to all odorous Gums, which are transparent. The Gum we commonly call by that Name is not much used in Physic, but is in great Esteem with the Varnishers, who dissolve it in *Oleum Spicæ*. It has been sometimes employ'd in Fumigations for violent De-fluxions of the Head, and in Cucuphas for the same Purpose. *Geoffroy.*

**COPALXOCOTL** *Tepeacensum*. A Tree mentioned by *Du Laet*, much like the Cherry-tree, whose Fruit abounds with a glutinous Juice. Hence they are, by the *Spaniards*, called *Cerafa Gummosa*. *Raii Hist. Plant.*

**COPAU**. A Sort of Wood which grows in *Brazil*, like that of the Walnut-tree. *Raii Hist. Plant.* The Tree is call'd *Arbor Brasiliana juglandi similis, nucibus carens*.

**COPELLA**. A Cappel. A Sort of Vessel, or Instrument, used by the Refiners, and in some Chymical Processes. It is made usually of the Ashes of calcin'd Bones, moisten'd with Small-beer or Water, into a Sort of Paste. But vegetable Ashes, perfectly freed from the Salts, will serve for the same Purpose. Both these bear the utmost Degree of Fire, without Fusion or Vitrification. See **CUPELLA**.

**COPEYA**, or **COPEIA** *Arbor Papyracea*. J. B. *Copey in Insula Hispaniola*. C. B. *Copeia Americanorum*. *Nieremberg*. A Tree which is a Native of *Hispaniola* in *America*. It bears a Leaf which serves for Paper, and of which the *Spaniards* make Cards. From this Tree a Sort of Pitch is made, as from the Pine. *Raii Hist. Plant.*

**COPHOS**, *κωφός*. A Sort of Toad, mention'd by *Nicander*.

**COPHOS**, *κωφός*. Deaf, or dumb, or both together. But it is also us'd to express a Dulness or Weakness of any of the Senses. See **AURIS**.

**COPHOSIS**, *κωφωσις*, from the preceding Word. Deafness; sometimes Dumbness, or a Dulness of any of the Senses.

**COPIBA** *Brasilienfisbus*. *Marggr. Arbor baccifera Brasilensis, fructu monopyreno, folio sesquipedali*. This is a tall Tree, which grows in *Brazil*, to which no Medicinal Virtues are attributed.

**COPISCUS**, *κοπίσκος*. A Sort of Frankincense mention'd by *Dioscorides*, *Lib.* 1. *Cap.* 81. This is the second in Goodness; and he says it is in less Fragments, and of a more tawny Colour.

**COPOS**, *κόπος*. Lassitude; Weariness; or a morbid Sensation of Lassitude, which comes on spontaneously, without any previous Motion, Exercise, or Labour. This is a frequent Symptom in acute Distempers, and is call'd *spontaneous Lassitude*, *κόπος ἀντομίδης*. *Galen. Comment. ad Hippocrat. Aph.* 31. *Lib.* 4.

**COPOVICH-OCCASSOU**. A Tree mentioned by *De Laet*, which grows in the *West Indies*. The Leaves are like those of the Pear-tree. And the Fruit, call'd *Oumery*, is like a large Pear, and, when perfectly ripe, it is esteem'd an excellent Fruit. *Raii Hist. Plant.*

**COPPAROSA**. Copperas. Green Vitriol. See **VITRIOLUM**.

**COPRAGOGUM**, from *κόπρος*, Dung, and *ἀγω*, to bring away. The Name of a gently cathartic Electuary mentioned by *Rulandus*, in his *Curat. Empiric. Gent.*

**COPRIEMETOS**, *κοπριέμετος*, from *κόπρος*, Dung, and *ἐμείω*, to vomit. A Person who vomits up his Excrement, as it sometimes happens in the last Stage of the *Iliac Passion*.

**COPROCRITICA MEDICAMENTA**, from *κόπρος*, Excrement, and *κρίνω*, to separate. Those cathartic Medicines

which evacuate only the Intestines, and bring away Excrement alone. They are the same as the **ECCOPROTICA**.

**COPROPHORIA**, from *κόπρος*, Excrement, and *φέρω*, to bring away. Purgation. *Blancard.*

**COPROS**, *κόπρος*. Dung, or Excrement.

**COPROSTASIA**, from *κόπρος*, Excrement, and *ἵσσω*, to stop. A Constriction of the Belly, or rendering it costive. *Blancard.*

**COPTARION**, *κοπταριον*. A Medicine formed in the Shape of a very small Cake. These were directed for Disorders of the *Aspera Arteria* and Lungs, and for many other Intentions, by the Antients. It is a Diminutive from

**COPTON**, or **COPTE**, from *κοπτο*, to beat or pound, because it was formed by beating or pounding the Ingredients into a Paste. This was the Form of a Medicine used by the Antients: It was a sort of Cake, made generally of vegetable Substances, and exhibited internally in various Intentions. *Paulus* mentions a *Copton*, which was directed to be apply'd externally to the Region of the Stomach and Liver.

**COPULA**. A Ligament.

**COQ**. An Abbreviation which frequently occurs in Medicinal Writers. It imports *Coque*, *Coquantur*, Boil, or, Let them be boiled.

**COQUENTIA MEDICAMENTA**. Medicines which promote Coction or Concoction.

**COR**. The Heart. This is a muscular Organ included in the Pericardium, hanging between the Lungs in the Thorax, and affording an Origin to the Trunks of the lower Blood-vessels, by means of which it receives and emits all the several Humours in the Body.

The Hearts of Animals, considered as an Aliment, are of difficult Digestion, and, according to *Paulus Aegineta*, *Lib.* 1. *Cap.* 85. contain a thick Juice, are with Difficulty concocted, and slowly transformed and converted into Nourishment. *Oribasius*, in his *Collect. Lib.* 2. *Cap.* 39. acknowledges, that the Hearts of Animals are fibrous, and consequently with Difficulty concocted, and slowly changed into a State fit for the Purposes of the animal Economy: But, if they are sufficiently concocted, they afford a large Quantity of Nourishment to the Body, and contain a laudable Juice. *Sennertus*, in his *Institutiones Medicinæ*, advances the same things with respect to the Hearts of Animals; and adds, that when they are duly concocted, they afford a firm and durable Nourishment.

**COR**, in Botany, signifies the Heart of Vegetables, or what is otherwise call'd **MEDULLA**, which see. *Cor*, or *Corculum*, also signifies that minute Portion of any Seed, from which the Root and Bud arise. *Raii Hist. Plant.*

**COR**, in Chymistry, imports Gold; and sometimes an intense Fire.

#### ANATOMY of the HEART.

The Heart is a muscular Body, situated in the Cavity of the Thorax, on the anterior Part of the Diaphragm, between the two Laminæ of the Mediastinum. It is, in some measure, of a conical Figure, flattened on the Sides, round at the Top, and oval at the Basis. Accordingly we consider, in the Heart, the Basis, Apex, two Edges, and two Sides, one of which is generally flat, and the other more convex.

Besides the muscular Body, which principally forms what we call the Heart, its Basis is accompanied by two Appendices, called Auriculae, and by large Blood-vessels; and all these are included in a membranous Capsula, named Pericardium.

It is hollow within, and divided by a Septum, which runs between the Edges, into two Cavities, call'd Ventricles, one of which is thick and solid, the other thin and soft. This latter is generally termed the Right Ventricle, the other the Left Ventricle; tho', in their natural Situation, the Right Ventricle is placed more anteriorly than the Left.

Each Ventricle opens at the Basis by two Orifices, one of which answers to the Auricles, the other to the Mouth of a large Artery; and accordingly one of them may be termed the auricular Orifice, the other the arterial Orifice. The Right Ventricle opens into the Right Auricle, and into the Trunk of the pulmonary Artery; the Left into the Left Auricle, and into the great Trunk of the Aorta. At the Edges of these Orifices are found several moveable Pellicules, called Valves by Anatomists, of which some are turn'd inward toward the Cavity of the Ventricles, and are called *Triglochines*, or *Tricuspides*; others are turn'd toward the great Vessels, and call'd *Semilunares*, or *Sigmoidales*. The Valvulae *Tricuspidæ* of the Left Ventricle are likewise termed *Mitrales*.

The inner Surface of the Ventricles is very uneven, many Eminences and Cavities being observable therein. The most considerable Eminences are thick fleshy Productions call'd *Columnæ*. To the Extremities of these Pillars are fasten'd several tendinous Cords, the other Ends of which are joined to the Valvulae *Tricuspidæ*. There are likewise other small, short, tendinous Ropes along both the Edges of the Septum between



the Ventricles. These small Cords lie in an obliquely transverse Situation, and form a kind of Network at different Distances.

The Cavities of the inner Surface of the Ventricles are small deep Fossulae or Lacunae, placed very near each other, with small prominent Interstices between them. The greatest Part of these Lacunae are Orifices of the venous Ducts.

The fleshy or muscular Fibres, of which the Heart is made up, are disposed in a very singular Manner, especially those of the Right or anterior Ventricle; being either bent into Arches, or folded into Angles.

The Fibres which are folded into Angles, are longer than those which are only bent into Arches. The Middle of these Arches, and the Angles of the Folds, are turned toward the Apex of the Heart, and the Extremities of the Fibres toward the Basis. These Fibres differ not only in Length, but in their Directions, which are very oblique in all, but much more so in the long or folded Fibres than in the short ones, which are simply bent.

It is commonly said, that this Obliquity represents the Figure 8; but the Comparison is very false, and can only agree to some bad Figures drawn by Persons ignorant of the Laws of Perspective.

All these Fibres, regard being had to their different Obliquity and Length, are disposed in such a manner, as that the longest form partly the most external Strata on the convex Side of the Heart, and partly the most internal on the concave Side; the Middle of the Arches and the Angles meeting obliquely and successively to form the Apex.

The Fibres, situated within these long ones, grow gradually shorter and straighter all the Way to the Basis of the Heart, where they are very short, and very little incurvated. By this Disposition the Sides of the Ventricles are very thin near the Apex of the Heart, and very thick toward the Basis.

Each Ventricle is composed of its proper distinct Fibres, but the Left Ventricle has many more than the Right. Where the two Ventricles are join'd, they form a Septum, which belongs equally to both.

There is this also peculiar to the Left Ventricle, that the Fibres, which form the innermost Stratum of its concave Side, form the outermost Stratum of the whole convex Side of the Heart, which consequently is common to both Ventricles; so that, by carefully unravelling all the Fibres of the Heart, we find it to be made up of two Bags contained in a third.

The Anterior or Right Ventricle is larger than the Posterior or Left, as was well observed by the Antients, and clearly demonstrated by *Helvetius*. They are both nearly of the same Length in Men; and, in some Subjects, they end exteriorly in a kind of double Apex.

All the Fibres are not directed the same Way, tho' they are all more or less oblique; for some end toward the Right Hand, others toward the Left; some forward, some backward, and others in the intermediate Places; so that, in unravelling them, we find that they cross each other gradually, sometimes according to the Length of the Heart, and sometimes according to its Breadth.

The Tubes which cross each other transversely are much more numerous than those which cross longitudinally; which ought to be taken notice of, in order to rectify the false Notions which have been entertain'd concerning the Motion of the Heart, which is, that it is performed by a Contorsion or Twisting like that of a Screw; or that the Heart is shorten'd in the time of Contraction, and lengthen'd in Dilatation.

The Fibres which compose the inner or concave Surface of the Ventricles, do not all reach to the Basis; some of them running into the Cavity, and there forming the fleshy Columnae, to which the loose floating Portion of the tricuspidal Valves is fasten'd by tendinous Ropes.

Besides these fleshy Pillars, the internal Fibres form a great many Eminences and Depressions, which not only render the inner Surface of the Ventricles uneven, but give it a great Extent within a small Compass. Some of these Depressions are the Orifices of the venous Ducts, found in the Substance of the Ventricles. The Circumferences of the great Openings at the Basis of the Heart are tendinous, and may be looked upon as the common Tendon of all the fleshy Fibres, of which the Ventricles are composed.

The Valves at the Orifices of the Ventricles are of two Kinds; one Kind allows the Blood to enter the Heart, and hinders it from going out the same Way; the other Kind suffers the Blood to go out of the Heart, but hinders it from returning. The Valves of the first Kind terminate in the Auricles, and those of the second lie in the Openings of the great Arteries. The first are termed Semilunar or Sigmoidal Valves, the others Trilocular, Tricuspidal, or Mitral.

The tricuspidal Valves of the Right Ventricle are fixed to its auricular Orifice, and turned inward toward the Cavity of the Ventricle. They are three triangular Productions, very smooth and polish'd on that Side which is turned toward the Auricle; and on the Side next the Cavity of the Ventricle they have

several membranous and tendinous Expansions, and their Edges are notched or indented. The Valves of the auricular Orifice of the Left Ventricle are of the same Shape and Structure, but they are only two in Number; and, from some small Resemblance to a Mitre, they have been nam'd Mitrales.

These five Valves are very thin, and fasten'd, by several tendinous Ropes, to the fleshy Columnae of the Ventricles. The Cords of each Valve are fixed to two Pillars; and between these Valves there are other small ones, of the same Figure. They may all be termed Valvulae Tricuspidales, Auriculares, or Venosae Cordis.

The semilunar Valves are six in Number, three belonging to each Ventricle, situated at the Mouths of the great Arteries; and they may be properly enough nam'd Valvulae Arteriales. Their concave Sides are turn'd toward the Cavity of the Arteries, and their convex Sides approach each other. In examining them with a Microscope, we find fleshy Fibres lying in the Duplication of the Membranes, of which they are composed.

They are truly semilunar, or in Form of a Crescent, on that Side by which they adhere; but their loose Edges are of a different Figure, each of them representing two small Crescents, the two Extremities of which meet at the Middle of this Edge, and there form a kind of small Papilla.

The great Artery, which goes out from the Left Ventricle, is term'd Aorta. As it goes out, it turns a little toward the Right Hand, and then bends obliquely backward, to form what is called the Aorta Descendens. From about the Middle of the convex Side of this Curvature three great Branches arise, which furnish an infinite Number of Ramifications to the Head, and upper Extremities of the Body; as the descending Aorta does, in the same manner, to the Thorax, Abdomen, and lower Extremities.

The Trunk of the Artery, which goes out from the Right Ventricle, is call'd Arteria Pulmonaris. This Trunk, as it is naturally situated in the Thorax, runs first of all directly upward for a small Space, then divides laterally into two principal Branches, one for each Lobe of the Lungs; that which goes to the Right Lung, is the longest.

#### AURICULÆ.

The Auricles are muscular Bags situated at the Basis of the Heart, one toward the Right Ventricle, the other toward the Left, and joined together by an inner Septum, and external communicating Fibres, much in the same manner with the Ventricles; one of them being named the Right Auricle, the other the Left. They are very uneven on the Inside, but smoother on the Outside, and terminate in a narrow, flat, indented Edge, representing a Cock's Comb, or, in some measure, the Ear of a Dog; and for that Reason a famous Anatomist of *Leyden* would fain have distinguished this Edge by the particular Name of Auricle, calling the rest the Bag. They open into those Orifices of each Ventricle, which I name auricular Orifices; and they are tendinous at their Opening, in the same manner as the Ventricles.

The Right Auricle is larger than the Left, and it joins the Right Ventricle by a common tendinous Opening. It has two other Openings united into one, and formed by two large Veins, which meet and terminate there, almost in a direct Line, call'd Vena Cava superior and inferior. The notched Edge of this Auricle terminates obliquely in a kind of obtuse Point, which is a small particular Production of the great Bag, and is turned toward the Middle of the Basis of the Heart.

The whole inner Surface of the Right Auricle is uneven, by reason of a great Number of prominent Lines, which run across the Sides of it, and communicate with each other by smaller Lines, which lie obliquely in the Interstices between the former. The Lines of the first Kind represent Trunks, and the others small Branches in an opposite Direction to each other. In the Interstices between these Lines the Sides of the Auricle are very thin, and almost transparent, seeming to be formed merely by the external and internal Coats of the Auricle joined together, especially near the Point.

The Left Auricle is, in the human Body, a kind of muscular Bag or Reservoir, of a pretty considerable Thickness, and unequally square, into which the four Veins open call'd Venae Pulmonares, and which has a distinct Appendix belonging to it, like a third small Auricle. This Bag is very even on both Sides, for which Reason one might be led to call it the Trunk of the pulmonary Veins, and its Appendix the Left Auricle. However, the Bag and Appendix have but one common Cavity, and therefore may still be both comprehended under the common Name of the Left Auricle. In Men the small Portions may likewise be named the Appendix of the Left Auricle; but, in other Animals, the Case is different.

This small Portion or Appendix of the Left Auricle is of a different Structure from that of the Bag or large Portion. Exteriorly it resembles a small oblong Bag, bent different Ways, and indented quite round the Edges; interiorly it is like the Inside of the Right Auricle. The whole common Cavity of the Left



Left Auricle is smaller in an adult Subject than that of the Right; and the fleshy Fibres of this Left Auricle cross each other obliquely, in Strata, differently disposed.

Besides the great common Vessels, the Heart has Vessels peculiar to itself, call'd the coronary Arteries and Veins, because they in some measure crown the Basis of the Heart. The coronary Arteries, which are two in Number, go out from the Beginning of the Aorta, and afterwards spread themselves round the Basis of the Heart, to the Substance of which they send numerous Ramifications.

The exterior Course of the Veins is pretty much the same with that of the Arteries; but they end partly in the Right Auricle, and partly in the Right Ventricle. They likewise terminate in the Left Ventricle, but in smaller Numbers; and in both they end by certain venous Ducts, which open into the Fossulae or Lacunae, already taken notice of, in the uneven inner Sides of the Ventricles. There are likewise Lacunae of the same Kind in the Auricles, between the prominent Lines; and, in the great Bag of the Left Auricle, we find likewise small Holes, which seem to have the same Use.

There are seldom more than two Arteries, of which one lies toward the Right Hand, the other toward the Left of the anterior third Part of the Circumference of the Aorta. The Right Coronary Artery runs in between the Basis and Right Auricle, all the Way to the flat Side of the Heart, and so goes half Way round. The Left Artery has a like Course between the Basis and Left Auricle; and, before it turns on the Basis, it sends off a capital Branch, which runs between the two Ventricles. Another principal Branch goes off from the Union of the two Arteries on the flat Side of the Heart, which, running to the Apex, there joins the other Branch.

The coronary Veins are distributed exteriorly, much in the same manner. Their Trunk opens principally into the Right Auricle, by a particular Orifice, furnish'd with a semilunar Valve. All the coronary Veins, and their Ramifications, communicate with each other; so that, if we blow thro' a small Hole made in any of these Branches, having first compress'd the Auricles, and large Vessels, we observe, that the Air swells all the Vessels, and the Ventricles also, by passing thro' the Ductus Venosi.

The Heart lies almost transversely on the Diaphragm, the greatest Part of it being in the Left Cavity of the Thorax, and the Apex being turn'd toward the bony Extremity of the sixth true Rib. The Basis is toward the Right Cavity, and both Auricles, especially the Right, rest on the Diaphragm.

The Origin or Basis of the pulmonary Artery is, in this natural Situation, the highest Part of the Heart on the fore Side; and the Trunk of this Artery lies in a perpendicular Plane, which may be conceived to pass between the Sternum and Spina Dorsi. Therefore some Part of the Basis of the Heart is in the Right Cavity of the Thorax, and the rest, all the Way to the Apex, is in the Left Cavity; and it is for this Reason, that the Mediastinum is turn'd toward that Side.

According to this true natural Situation of the Heart, the Parts, commonly said to be on the Right Side, are rather anterior; and those on the Left Side posterior; and that Side of the Heart, which is thought to be the fore Side, is naturally the upper Side; and the back Side consequently the lower Side.

The lower Side is very flat, lying wholly on the Diaphragm; but the upper Side is a little convex, thro' its whole Length, in the Direction of the Septum, between the Ventricles. And it may be proper here to remark, that tho' commonly received Terms of Art may still be retain'd, yet it is necessary to prevent their communicating false Ideas to those who have not had an Opportunity of making Observations themselves, or of being instructed by others.

The Heart, with all the Parts belonging to it, is contain'd in a membranous Capsula, call'd the Pericardium, which is, in some measure, of a conical Figure, and much larger than the Heart. It is not fix'd to the Basis of the Heart, but round the large Veins, above the Auricles, before they send off the Ramifications, and round the large Arteries, before their Divisions.

The Pericardium is made up of three Laminae, the middle and principal of which is composed of very fine tendinous Filaments, closely interwoven, and crossing each other in different Directions. The internal Lamina seems to be a Continuation of the outer Coat of the Heart, Auricles, and great Vessels. The Trunks of the Aorta, and pulmonary Artery, have one common Coat, which contains them both, as in a Sheath; and is lined on the Inside by a cellular Substance, principally in that Space which lies between where the Trunks are turn'd to each other, and the Sides of the Sheath. There is but a very small Portion of the inferior Vena Cava contain'd in the Pericardium.

It is the middle Lamina, which chiefly forms the Pericardium; and the Figure of this Bag is not simply conical, its Apex, or Point, being very round, and the Basis having a particular Elongation, which surrounds the great Vessels as amply as the other Portion surrounds the Heart.

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The Pericardium is closely connected to the Diaphragm, not at the Apex, but exactly at that Place which answers to the flat or lower Side of the Heart; and it is a very difficult Matter to separate it from the Diaphragm in Dissection. This adhering Portion is in some measure of a triangular Shape, answering to that of the lower Side of the Heart; and the rest of the Bag lies upon the Diaphragm, without any Adhesion.

The external Lamina, or common Covering, as it may be call'd more properly, is form'd by the Duplication of the Mediastinum. It adheres to the proper Bag of the Pericardium, by the Intervention of the cellular Substance in that Duplication; but leaves it where the Pericardium adheres to the Diaphragm, on the upper Surface of which it is spread, as being a Continuation of the Pleura.

The internal Lamina is perforated by an infinite Number of very small Holes, thro' which a serous Fluid continually transudes, in the same manner as in the Peritonaeum. This Fluid, being gradually collected after Death, makes what is call'd the Water of the Pericardium, which is found in considerable Quantities in opening dead Bodies, while they remain fresh: Sometimes it is of a redish Colour, which may be owing to a Transudation of Blood thro' the fine Membrane of the Auricles.

The Heart, and Parts belonging to it, are the principal Instruments of the Circulation of the Blood. The two Ventricles ought to be consider'd as two Syringes so closely joined together as to make but one Body, and furnish'd with Suckers, placed in contrary Directions to each other, so as that, by drawing one of them, a Fluid is let in, and forced out again by the other.

The Heart is made up of a Substance capable of Contraction and Dilatation. When the fleshy Fibres of the Ventricles are contracted, the two Cavities are lessen'd in an equal and direct manner, not by any Contorsion or Twisting, as the false Resemblance of the Fibres to a Figure of Eight has made Anatomists imagine. For, if we consider attentively, in how many different Directions, and in how many Places, these Fibres cross each other, we must see clearly, that the whole Structure tends to make an even, direct, and uniform Contraction, more according to the Breadth or Thickness, than according to the Length of the Heart; because the Number of Fibres situated transversely, or almost transversely, is much greater than the Number of longitudinal Fibres.

The fleshy Fibres, thus contracted, do the Office of Suckers, by pressing upon the Blood contain'd in the Ventricles; which Blood, being thus forced toward the Basis of the Heart, presses the tricuspidal Valves against each other, opens the Semilunares, and rushes with Impetuosity thro' the Arteries, and their Ramifications, as thro' so many elastic Tubes.

The Blood, thus push'd on by the Contraction of the Ventricles, and afterwards press'd by the elastic Arteries, enters the capillary Vessels, and is from thence forced to return by the Veins to the Auricles, which, like Retirements, Porches, or Antechambers, receive and lodge the Blood return'd by the Veins during the Time of a new Contraction. This Contraction of the Heart is, by the Anatomists, term'd *Systole*.

The Contraction or *Systole* of the Ventricles ceases immediately, by the Relaxation of their fleshy Fibres; and, in that time, the Auricles, which contain the venous Blood, being contracted, force the Blood thro' the tricuspidal Valves into the Ventricles, the Sides of which are thereby dilated, and their Cavities enlarged. This Dilatation is term'd *Diastole*.

In this Manner does the Heart, by the alternate *Systole* and *Diastole* of its Ventricles and Auricles, push the Blood thro' the Arteries to all the Parts of the Body, and receive it again by the Veins. This is call'd the Circulation of the Blood, which is carried on in three different Manners.

The first and most universal kind of Circulation is that by which almost all the Arteries of the Body are fill'd by the *Systole* of the Heart, and the greatest Part of the Veins evacuated by the *Diastole*.

The second kind of Circulation, opposite to the first, is thro' the coronary Vessels of the Heart, the Arteries of which are fill'd with Blood, during the *Diastole* of the Ventricles, and the Veins empty'd during the *Systole*.

The third kind of Circulation is that of the Left Ventricle of the Heart, thro' the venous Ducts of which a small Quantity of Blood passes, without going thro' the Lungs, which is the Course of all the remaining Mass of Blood. See *SANOVIA*. *Winfow*.

#### WOUNDS of the HEART.

When the Heart is wounded, a large Quantity of Blood is discharged, provided any of its larger Arteries or Veins are pierced; the Pulse becomes languid, and the Colour highly pale; a cold and fetid Sweat breaks out, and, the Extremities becoming excessively cold, Death speedily succeeds. If only the Substance of the Heart is injured, and the Weapon has not penetrated into the Ventricles, the Patient has sometimes been observed to remain alive for a Day or a Night. But if the



Point of the Weapon reaches the Ventricles, the Extremities forthwith become cold, and a sudden Death ensues. *Lammii Observat. Medicinal.*

Wounds of the Heart are always esteem'd mortal, and to admit of no Cure. See POLYPUS.

#### DISORDERS of the PERICARDIUM.

The ensuing ingenious Observations, made by Dr. *Freind*, shew, that the Pericardium is subject to various Disorders, tho' too seldom regarded.

*Avenzoar* takes notice of an Abscess in the Pericardium, which I don't find had been describ'd, or even observed, by any of the *Greeks* or *Arabians*: And there is no doubt, but this Membrane, and the Mediastinum, to which it is contiguous, are subject, as well as the Pleura and Lungs, to an Inflammation. *Salvus Diverfus*, who has, with good Judgment, given us an Account of several Distempers, overlook'd by the Generality of Writers, describes this Disorder in a distinct Chapter by itself; and says, it had been taken notice of by no practical Author before him. His Description of the Symptoms, which follow upon an Inflammation here, is very exact and particular; and, because the Case is one pretty much out of the Way, tho', without Dispute, such as often occurs in Practice, and may be easily discern'd, if well attended to, I shall just, in short, give a Sketch of what he observes, which, indeed, answers to what I have recited from *Avenzoar*. There is an acute Fever, Inquietude, Thirst, breathing thick and quick, great Heat in the Thorax, little Pain, except at the Sternum; in which Place was perceived an uneasy Straitness, and Stop, rather than an exquisite Pain, in Respiration, a Cough always with it, and the Pulse hard, just as it is in a Pleurisy: However, Want of acute Pain distinguish'd it from a Pleurisy; and a much less difficult Degree of Breathing, from a Peripneumony. When the Pericardium was inflamed, too, there was a more intense Heat, and a frequent Syncope; in one Word, all the Symptoms worse. He very rightly infers, that there is a less Degree of Pain in these Membranes, because they are loose, and not tied to the Ribs, as the Pleura is; only at the Sternum, to which the Mediastinum is fasten'd, there was felt some Uneasiness. And, as a Proof of what he asserts, he gives the Case of one, who died on the ninth Day after some Fits of a Syncope; where, upon Dissection, there appear'd an Inflammation of the interseptient Membranes, as he calls them, and some Part of the Pericardium. And this Distemper, I don't question, happens oftener than our Practitioners commonly are aware of. When an Inflammation here suppurates, the Matter may burst into the Cavity of the Mediastinum; for, tho' there have been great Disputes among Anatomists, whether it has any Cavity or no, the Knife, I think, decides the Controversy, and shews, that it has one, tho' not so large as some have describ'd it; at least, as it rises from the Sternum, its two Membranes lie at such a Distance, that it is capable of having a Humour or Pus fall down between them, as *Columbus* first observed, and which he and *Barbette* order to be taken out by trepanning the Sternum. And *Spigelius* makes this further Observation, that he has sometimes seen Surgeons imposed upon by Wounds, transversely made, in this Place; so as to think they had penetrated the Lungs, when, indeed, they had only reach'd into this Cavity. As a further and more convincing Proof of what has been here remark'd, a Gentleman, justly esteem'd for his long Experience, and sound Judgment, in every thing relating to Surgery, has inform'd me, that Abscesses of the Mediastinum particularly happen in Venereal Distempers; and that, in such Cases, he has frequently used the Trepan with great Success. You may, from hence, be satisfied, how little Ground there is for that Hint of *Paré*, where he seems to think this Operation a ridiculous Attempt.

*Avenzoar*, I have remark'd, has mention'd an Inflammation and Abscess in the Pericardium: And *Rondeletius*, in his Book of *Distinguishing Diseases by the Symptoms*, has something concerning the same Distemper. He takes notice, that, in this Case, besides a less Difficulty of Breathing, when they spit, they are less relieved by it, than in a Peripneumony. In a Person he dissected, he found the Pericardium extremely inflamed, and some sanious Matter round the Heart. A like Example we may see in *Hildanus*, where the Quantity of the extravasated Blood, mix'd with Fluid, amounted to above four Pints; and yet no Part of the Heart itself was ulcerated: The chief Complaints of the Person, some time before his Death, were Pain, which shot upwards to his Shoulders, and a violent Palpitation. *Rondeletius* owns this to be as a very acute, and dangerous, so a very rare Case, and one which nobody had ever observed before. As to this Writer, and *Salvus*, perhaps neither of them might have been apprised of what the other had said upon this Argument; for tho' *Rondeletius* died many Years sooner, yet his Book was not printed till the Year before *Salvus* publish'd his. Yet, after all these new Discoveries, as they are call'd by the two mention'd Authors, we see, that the Disease is here very fully and clearly describ'd by *Avenzoar*. And this is no more than what has happen'd, in the like Cases, to

other Moderns, who, for want of reading the Antients, have publish'd some Observations as entirely their own, and such as were never hit upon before.

Our Author still affords us something more relating to the Pericardium. He speaks of its being increased by the Generation of some new Substance, like Cartilages, or Pellicles; a Case, which, he says, had escaped the Observation of every body before him. This, I suppose, must be meant of the Coats of this Bag being thicken'd; for, when there is an Obstruction of the Glands here, or too great a Viscousness of the Lymph, which should supply the Liquor naturally contain'd in its Cavity, the Membranes of the Pericardium often enlarge their Bulk to a great Degree, and very often are found firmly adhering to the Heart; more particularly in tabid and asthmatic Cases, so as to cause a frequent Syncope and Palpitation. And the Adhesion, in this Case, not being carefully examin'd, may perhaps have given Occasion to what *Columbus*, and others, say, of their having observed Hearts without any Pericardium at all. Certain it is, that the Coalition of this Membrane is much more probable, than the entire Want of it. I have seen an Instance, where it has been, throughout all its Compass, above a Quarter of an Inch thick, and so closely united with the Heart, that it could not any-where be divided, without tearing. It appear'd very evident, that there had been an Inflammation; for some Parts of it were scirrhus, and others full of little Abscesses: In which Case there had been, for some time, a great Decay of Strength; then a Fever succeeded, with a violent Shortness of Breath, and Pain in the Thorax. After this, the Pains were more dispersed over all the Body, and particularly the Limbs, somewhat of the Fever still continuing. Towards the End of the Disease was observed a constant Quickness, and often great Inequalities and Intermittions of the Pulse, attended with strong Palpitations. At last, the Patient died unexpectedly in a Moment; tho', upon considering the Case, as it appear'd in opening those Parts, it was more wonderful, indeed, that the Circulation could be carry'd on so long, since, in these Circumstances, the Heart had scarce any room to move in: Besides, that there was a large Polypus both in the pulmonary Artery, and the Left Ventricle of the Heart, which might, perhaps, at first owe its Production to the original Disease of the Pericardium.

A Dropsy in this Part is likewise taken notice of by *Avenzoar*; a Case, he says, he had never seen himself, nor had *Galen* ever mention'd it: Notwithstanding this, such a Case has been observed by others. For tho', in a natural State, and in a sound Constitution, the Water here contain'd is not above two or three Spoonfuls; yet, in morbid Bodies, there is frequently found half a Pint, or more; as likewise in old People. *Piso* gives an Instance, where several Pints were taken out; and we need not be surpris'd at such an extraordinary Distention of this Membrane, since the like happens in many others. *Freind's History of Physic*, Vol. 2.

CORACINE, *κορακίνη*. An Epithet for a sort of Pustil, quoted by *Galen*, from *Asclepiades*. *De Comp. M. per Gen.* L. 5. C. 11.

CORACINUS, Offic. Rondel. de Pisc. 1. 128. Schonef. Ichth. 32. Raii Ichth. 300. Emac. Synop. Pisc. 95. Bellon. de Aquat. 115. Aldrov. de Pisc. 69. Salv. de Aquat. 117. Charlt. de Pisc. 15. Jons. de Pisc. 31. *Coracinus subniger*, Gesn. de Aquat. 294. THE CROW-FISH.

This is a Fish mention'd by *Galen*, *Aldrovandus*, and *Brucyerinus*. It is found in Rivers, particularly in the Nile and the Mediterranean Sea. Certain Bones, found in the Head of this Fish, are said to be possess'd of some medicinal Virtues. They are call'd *Lapides Coracini*, and are recommended against nephritical and colical Pains, and the Jaundice, by *Rondeletius*.

CORACOBOTANE, from *κοραξ*, a Crow, and *βοτάνη*, a Plant. A Name for the *Laurus Alexandrina*. *Blancard*.

CORACOBACHIALIS *Musculus*.

This is a long Muscle, lying on the Inside of the upper Half of the Os Humeri, that is, on that Side which answers directly to the Hemisphere of the Head of the Bone, and to the prominent internal Condyle.

It is fix'd above to the Point of the Coracoide Apophysis, between the Insertions of the Biceps and Pectoralis minor, by a Tendon, which, as it descends, adheres, for a good Way, to the Tendons of these two Muscles. Afterwards it becomes fleshy, and is inserted, by a broad thin Extremity, with a small Mixture of tendinous Fibres, in the middle Part of the Os Humeri, close by the ligamentary Frænum of the Latissimus Dorsi and Teres major. Its Insertion is continued down below the Frænum, near the internal Intermuscular Ligament, to which it likewise adheres a little.

This Muscle passes behind the Tendon of the Pectoralis major, and, as it is perforated in the Middle to give Passage to a Nerve, it has by some been term'd *Perforatus Cafferii*, that Author being the first who gave a particular Figure of it. *Winflov*.



**CORACO-HYOIDÆUS**, otherwise call'd *Omo-plato-hyoidæus*, or *Omo-Hyoidæus*.

This is a very long small Muscle, much narrower than the *Sterno-hyoidæus*, and situated obliquely on the Side of the Neck or Throat, between the Scapula and Os Hyoides. It is a Digastric Muscle, being divided into fleshy Portions, join'd endwise to a short middle Tendon.

It is commonly fix'd, by the lower Extremity, to the superior Costa of the Scapula, between the small Notch and the Angle, and sometimes very near the Angle; and from thence some Anatomists have given it the barbarous Name of *Costo-hyoidæus*.

From thence it passes over the *Coracoide Apophysis*, adhering sometimes to it by a kind of Aponeurosis, or membranous Ligament; and from this Adhesion the Name of *Coraco-hyoidæus* was given it by some, who had not discover'd its main Insertion.

It is likewise often fix'd to the Clavicle by ligamentary or fleshy Fibres; and I have sometimes seen it inserted in the whole middle Portion of that Bone, being inseparably united with the *Sterno-hyoidæus*. In one Subject I found it to be a kind of Biceps, one Portion of it being fix'd to the Angle of the Scapula, the other to the Extremity of the Clavicle.

Having pass'd the Clavicle, it is bent forward, and runs between the *Sterno-mastoidæus* and internal Jugular Vein, the small middle Tendon being situated in this Place. From thence it runs up to its Insertion in the inferior lateral Part of the Basis of the Os Hyoides, near the Cornu, and Insertion of the *Sterno-hyoides*, which it covers a little. *Winslow*.

**CORACOIDES PROCESSUS**. A Process of the Scapula, call'd thus because of its Resemblance to a Crow's Bill. See *SCAPULA*.

**CORACOIDEUS**. The same as *CORACOBRACHIALIS*.

**CORACUM EMPLASTRUM**. A Plaster describ'd in *Paulus Aegineta*, L. 7. C. 17. He recommends it as a proper Topic for the Pudenda, and spreading Ulcers.

**CORAL**. See *CORALLODENDRON*.

**CORALLACHATES**. A Species of the *Achates*, which resembles Coral, with respect to Colour.

**CORALLATUM**. A Name for the *Mercurius Præcipitatus ruber*. See *MERCURIUS*.

**CORALLINA**. Offic. J. B. 3. 810. Raii Hist. 1. 65. Chab. 577. Tourn. Inst. 570. Elem. Bot. 444. *Corallina Anglica*. Ger. 1379. Emac. 1571. *Muscus Maritimus sive Corallina Officinarius*. C. B. 363. *Muscus marinus, sive Corallina alba Officinarius*. Park. 1295. **SEA CORALLINE, WHITE WORM-SEED**.

This is a small low Plant, of a somewhat stony Consistence, seldom growing above two or three Inches high, much branch'd, full of short, small, jointed, round Stalks, of a white Colour for the most part, though it is sometimes found purplish and greenish; it is of a saltish Taste, and of a pretty strong Smell. It is found growing every-where, upon the Rocks of the Sea, and frequently on Oysters, and other Shells.

*Coralline* is only used to destroy Worms in the Stomach and Bowels, being given from half a Dram to a Dram, in coarse Powder, in any convenient Vehicle. *Miller's Bot. Off.*

**CORALLIUM**, Coral. Of this there are many Species mentioned by Botanists. But those principally used in Medicine, are the following:

**CORALLIUM ALBUM**. Offic. Raii Hist. 1. 62. Calc. Musf. 7. Worm. 232. Boet. 318. J. B. 3. 805. Ger. 1381. 1576. Hist. Oxon. 3. 655. *Corallium album majus*. Park. 1300. *Corallium album Officinarius*. Chab. 572. *Corallium album*. Tourn. Inst. 572. Elem. Bot. 445. C. B. 366. **WHITE CORAL**.

There are several Kinds of white Coral, some growing taller and larger, some shorter and smaller; the best Sort is pure white, of a firm, stony, and solid Substance, through its whole Body, not hollow, porous, scurfy, nor easily friable. It grows on the Rocks in divers Parts; the best comes from the *Mediterranean*.

*White Coral* is cooling, drying, and binding, good for the Heart-burn, or any Disorders which proceed from sharp acid Juices in the Stomach or Blood. *Miller's Bot. Off.*

It is said to strengthen the Liver, and to stop Fluxes of all Kinds.

**CORALLIUM RUBRUM**. Offic. Raii Hist. 1. 60. Worm. 231. J. B. 3. 805. Ger. 1381. Emac. 1575. *Corallium rubrum majus*. Park. 1299. *Corallium rubrum*. C. B. 366. Tourn. Inst. 572. El. Bot. 445. Hist. Oxon. 3. 655. *Corallium sive Corallium*. Chab. 572. *Corallium*. Calc. Musf. 3. *Corallium verum*. Boet. 318. **RED CORAL**.

This is a stony Plant, which grows upon the Rocks at the Bottom of the Sea, spreading out round Branches, like a small Tree, which are rough and whitish on the Outside while growing; but, when polish'd, of a pure red Vermilion-colour. It grows in the *Tyrrhenian Sea*, and on the Coasts of *Spain* and *France*.

This is in much greater Use than the *white Coral*, being esteem'd to have greater Virtue, and to be cordial, drying, and restraining, good to sweeten the Blood, and free the Stomach from acid four Juices; it stops all Kinds of Fluxes and Hæmorrhages; and, where-ever an Alkali is necessary, this will do as much as any.

The only officinal Preparation from *Coral*, is the *Electuarium Diacorallion*. *Miller's Bot. Off.*

#### DIACORALLION: The Coral Electuary.

Take of white and red Coral, of the true *Armenian Bole*, and Dragons Blood, of each one Dram; of Pearls, half a Dram; of Aloes-wood, red Roses, Gum Tragacanth, and Cinnamon, of each two Scruples; of white and red Saunders, of each one Scruple; of Sugar, dissolv'd in small Cinnamon-water, four times as much as the Whole; and make them into an Electuary.

This hath been continued through all the Editions of the *College Dispensatory* the same; and all the Ingredients agree in the main Intention of an Astringent; but it hath been hitherto so seldom ordered in extemporaneous Prescriptions, that, I believe, it is not to be met with in the Shops.

Whether Coral exhilarates the Heart, or is a Preservative against the Epilepsy, if it be given, to the Quantity of ten Grains, to the new-born Infant, in the Mother's Milk, as *Schroder* advises, I shall not determine.

Outwardly it is recommended for incarning of Ulcers, obliterating the Marks of Cicatrices, and in Collyria for Eyes subject to shed Tears; and to quicken the Sight.

Our Nurses, and old Women, here in *England*, have a Custom of hanging Coral about the Necks of Infants, to promote Dentition; and the Children taking Delight in putting them to their Mouths, and biting them, because they are smooth and cold, by that means rub their Gums, and so facilitate the Eruption of their Teeth; not that such an Effect proceeds from any Property or occult Virtue of the Coral, as the Vulgar imagine.

The Tincture of Coral is very much commended in pestilential Fevers. *Boetius de Boot* used it with Success; and *Garenciers* says, it seldom deceived his Expectations in these Distempers; but it is a Question among the Chymists, whether there be any true and genuine Tincture of Coral. *Raii Hist. Plant.*

**CORALLIUM NIGRUM**. Raii Hist. 1. 61. Hist. Oxon. 3. 655. Worm. Musf. 233. Calc. Musf. 10. Misc. Cur. Dec. 11. A. 1. 57. *Corallium nigrum sive Antipathes*. J. B. 3. 804. Ger. 1382. Emac. 1575. Chab. 573. Park. Theat. 1300. *Corallum nigrum*. C. B. Pin. 366. Rar. Musf. Bell. T. 28. *Keratophyton arboreum, nigrum*. Boerh. Ind. A. 6. *Lithophyton nigrum arboreum*. Tourn. Inst. 574. *Lithophytum nigrum, majus, & crassius*. Elem. Bot. 446. *Pseudo-corallium nigrum*. Boet. 319. **BLACK CORAL**.

It is found sometimes in the *Italian Sea*; but more frequently in the *American Seas*. It agrees with other Corals in Virtues.

Another Species of the *Corallium* is the

**ASTROITES, STELLARIS, ET STELLÆ LAPIS**. Mont. Exot. 7. *Astroites distinctissime Stellæ emulat*. Musf. Swam. 6. *Astroites*. Gesn. de Fig. Lap. 35. Worm. Musf. 68. Plot. Hist. Oxon. 87. Tab. 2. f. 6. 7. *Lapidis Astroitidis, sive Stellaris primum genus*. Boet. 298. Cat. Jamaic. 2. Hist. Vol. 1. Pag. 54. Tab. 21. *Stellatus Lapis*. Aldrov. Musf. Metall. 872. Fig. 877, 878, 879. *Stellaris Lapis*. Læet. de Gem. 97. **STAR-STONE**.

This is found in the Sea near *Jamaica*, and has the same Virtues attributed to it as the Coral.

Coral is call'd *Lithodendron*, that is, a Tree of Stone, it being, in Effect, nothing but a stony Plant, which grows under hollow Rocks in many Parts of the *Mediterranean Sea*, where there is the greatest Depth of Water. There are three different Kinds of it, Red, White, and Black; and we sometimes meet with little Boughs, which are red in some Parts, and black in others: The red Coral is the most common, and more used in Physic, than either the black or white; and the best Kind of it is well compacted, smooth, and of a shining high Colour.

The white Coral is more rare than the red; it ought to be hard, smooth, bright, and white as Ivory. The black Coral is the most rare, and least used in Physic; 'tis a kind of *Lithophyton*, call'd by the Antients *Antipathes*, or *Antipathes*; and by *Tournefort*, *Lithophyton nigrum arboreum*. We should make Choice of that which is close, heavy, smooth, shining, and of a deep black. Corals are generally cover'd in the Sea with a tartarous Crust, which can be easily separated from the Body of the Plant, and probably proceeds from foam harden'd and petrified. We may distil from this Crust a Sort of urinous Spirit,



Spirit, replete with volatile Salt, and a little black Oil, which, in a great measure, have the same Virtue, Taste, and Smell, as those extracted from Hartshorn. While Corals are young and tender, the Tops of their Branches are surrounded with little thick Balls, as large as our red Goosberries; they are soft, and contain an oily milky Liquor, of a sharp astringent Taste. These little Balls are the Fruit of the Coral, and in them ought we to look for the Seed; for the white Liquor of the Fruit, being spilt on Rocks, produces Plants of Coral. These little Balls harden and petrify, in proportion to the Growth of the Tree. Some have affirmed, that the Coral is always soft, before it is taken out of the Sea; and that it only grows hard, after it is taken from thence; but Experience has shewn us the contrary.

If you steep, for a Day or two, red Coral in white Wax, melted on hot Embers, the Coral will lose its Colour, and become white, and the Wax will assume a yellow Dye; but there must be a little more Wax than Coral.

If you steep another Piece of red Coral in the same Wax, it will become brown; and if, a third time, you steep red Coral in the same Wax, it will come out red. Wax dissolves a little the Bitumen which is upon the Coral, and makes it red. We may extract the Tincture of Coral, contain'd in the white Wax, by infusing it in Aqua Vitæ impregnated with Salt of Tartar. Many hang red Coral about their Necks in order to stop Bleedings, to cleanse the Blood, and strengthen the Heart: I am inclin'd to think, that its red Colour, resembling nearly that of the Blood and Heart, has induced People to believe it had these Virtues; but we know by Experience, that the external Application has no Effect.

Coral is to be prepared by grinding it on a Marble into a Powder, as small as possible, that it may be the more easily dissolved; and we use this Preparation of Coral for stopping Dysenteries, Diarrhœas, the Flux of the Hæmorrhoids, the Menfes, bloody Fluxes, and all other Diseases which proceed from acrimonious Humours. A Dose of this, from ten Grains to a Dram, may be given in Water of Knot-grafs, or any other Liquor.

The more the red Coral is pounded, the more it loses of its Colour, and 'tis insipid to the Taste. If you have any Curiosity to distil red Coral, you may put eight Ounces pulverized in a Retort, and you will only draw off about two Drams of a spirituous Liquor, of a dark Hue, mix'd with some Particles of black Oil, of a fetid Smell, like what we distil from Hartshorn, and other Parts of Animals, and of a salt and bitter Taste, which proceeds from the volatile alkaline Salt. Though I mention the Quantity of Liquor commonly drawn from Coral, yet there cannot be any general Rule laid down concerning it; for Coral yields more or less, in proportion to the Time it has been taken out of the Sea, and has been kept. The black Coral yields more Spirit, volatile Salt, and Oil, than any other Coral.

The red and white Coral, being calcin'd in a Crucible, become both white, and are commonly insipid to the Taste; but we sometimes find white Coral, after it is pulverized, and a little calcin'd, to be very salt; and therefore we may conclude, that it had the saltish Taste from the Water of the Sea, which it received into its Pores: However that be, I have always observed this Coral more porous and spongy than the red; and I attribute that to its wanting that bituminous Substance, which constitutes the red Colour; and, as it stops the Pores of the Plant, renders the Coral more compact and close; but, for any thing else, the red and white Coral seem to be of the same Nature, and to have the same Qualities in Physic. 'Tis, nevertheless, worth while, here, to take notice of a Circumstance which seems to denote a small Difference betwixt the Formation of these two Plants: If you take distil'd Vinegar, and pour it on calcin'd red Coral, it will make a considerable Effervescence, and boil up to a pretty good Height, and continue for a little time; but, should the same be pour'd on white calcinated Coral, it will effervesce, but weakly, and sink in an Instant. This Difference of Effervescence does not hinder the Corals from dissolving equally, and making each a Salt and a Magistery alike in all respects.

The Difference in the Effervescences of the red and white calcin'd Coral arises from hence; that the Pores of the white Coral, which were larger than those of the red in their natural State, are more enlarg'd and worn by Calcination, so that they have lost a great Part of their Resistance; and the Points of the Vinegar entering there, and finding but little Resistance, produce a very easy Separation of the Parts; whereas the red Coral, which is more compact in its Parts, preserves in the Calcination all its Power of Resistance; and the Points of the Vinegar, poured on it, excite a violent Separation.

Out of eight Ounces of red calcin'd Coral, from which the active Principles have been distil'd, in the manner above-mentioned, by Lixivation, four Scruples of fix'd alkaline Salt may be procur'd; and this must evidently be some of the Sea

Salts that penetrate into the Coral, which is render'd alkaline by the Fire, during the Calcination of the Matter.

We may draw from calcin'd Coral a great many Particles of Iron, by means of a Knife touch'd with a Loadstone.

#### TINCTURE of CORAL.

This Operation consists in the Separation of a little of the bituminous red Matter, wherewith all red Coral is ting'd.

Put into a Matras, what Quantity you please, of red Coral prepar'd, or pulverized in the finest manner; pour on it Oil of Tartar per Deliquium, or of fix'd Nitre, till either rises above the Coral about four Inches; then let the Vessel be plac'd on warm Sand, and continue there in Digestion for eight Hours, only shake the Matter now-and-then: Thus the Liquor will be of a red Colour; and, after being filtred, it will be, what we call, the Tincture of Coral. It will preserve the alkaline Acrimony of its Dissolvent; but it may be sweeten'd by mixing an eighth Part of the Spirit of Vitriol in it.

The Tincture of Coral may be also extracted by the same Method with Aqua Vitæ, mix'd with Salt of Tartar. The Tincture of Coral is reckon'd proper to cleanse the Blood, to strengthen the Heart, for refilling malignant Humours, and driving them out by Perspiration; to stop bloody Fluxes, and Looseness of the Belly. A Dose, from four to sixteen Drops, may be given in any Liquor proper for the Distemper; but it may be exhibited in much larger Doses.

#### R E M A R K S.

Among all the Kinds of Coral, the Red has met with the Preference in Physic, especially from the Antients, because of its Colour; for they pretended, that its red Colour, which approaches to that of Blood, was very proper for cleansing and strengthening the Heart. They knew it, by Experience, to be astringent; but, it does not appear, that they had any Notion of its alkaline and absorbent Virtues: This principal and distinguishing Quality was discovered by modern Chymists; for the Antients believ'd, that its Colour was the Cause of its stopping Blood, and other Humours.

And, having once given into the Notion, that the red Colour of Coral was of very great Virtue and Efficacy in Medicine, they spar'd no Pains to find out the Means of separating that Tincture from the Body of the Coral. Both antient and modern Chymists have made it their principal Business, and have labour'd as much to find out this, as ever they did to make Gold potable; because they were persuaded, that, after having made this Discovery, they could find out a kind of universal Medicine or Remedy, for all the Disorders of the Body. Accordingly we see, in Authors, a great Number of Descriptions of the Tincture of Coral; and each seems to contend for the Honour of his own. It would be tedious to recount them in this Place; but this I can say, that though I have made Experiments by most of their Descriptions, I cannot find any one true Tincture of Coral. This determin'd me to disregard the Experiments of those who have gone before me, and to have recourse solely to my own. I have applied myself to discover some certain and easy Menstruum for extracting that Tincture, and in this I am inclin'd to think I have succeeded; but must, however, confess, that I cannot give into the Opinion of the Antients, concerning the great Virtues they attribute to the Tincture of Coral: I believe rather, that it is only a little, insipid, bituminous Matter, with which all Coral is ting'd, and that there is little Virtue in it. Mean time I have not been wanting to make Researches into the Matter, as there are many Physicians at this Day, who are prepossessed with an Opinion of these great Virtues; and, besides, Experiments may be of Use to Natural History.

The Tincture of Coral may be extracted by making a warm Infusion, for some Days, of red pulveriz'd Coral, and the Juice of a Lemon newly squeez'd. The first Day there will be an Ebullition, occasioned by the Meeting of the acid and alkaline Particles. When the Tincture is finish'd and filtred, it will lose all the Acidity of the Lemon, and will have somewhat of a bitter Taste; it will not preserve its Colour long, but will be losing it by little and little every Day; and, in the Space of a Month, the Liquor will corrupt; tho' this Corruption of the Liquor may be prevented, by pouring the Oil of sweet Almonds one Inch deep above the Tincture in a Phial. But, as it is an easy Matter to prepare this Tincture of Coral with Lemon-juice, People may make it frequently, and not give it time to grow old. It retains the Smell of the Lemon, which makes it a little more agreeable. A Dose from half a Dram to ten Drams may be administer'd.



One may also extract the Tincture of Coral by making an Infusion, for eight Days, of red Coral prepared, and the Spirit of Honey rectify'd, and made by Distillation as clear as Water; and this Menstruum will extract the Colour of the Coral, and lose its Acidity, because it will be absorb'd by the Alkali. One may take of this Tincture from twelve Drops to thirty in any proper Vehicle.

We may, moreover, extract the Tincture of Coral, by making a warm Infusion and Digestion, for eight Days, of small red Coral-branches in the Spirit of Wax rectify'd. The Dissolvent will be of a deep-red Tincture, and the Coral will have a grey Colour on the Outside, but inwardly it will continue red, because the Spirit of Wax will not penetrate there. A Tincture also of prepared Coral may be thus extracted; but, whatever Way you extract it, it retains so disagreeable a Smell and Taste of the Menstruum, that it can scarcely be made use of in Medicine.

#### DISSOLUTION of CORAL.

In order to dissolve Coral, you may take any Quantity, and reduce it to the smallest Parts possible on a Porphyry; then put it in a large Matrafs, and pour distil'd Vinegar upon it, till it rise four Inches above the Coral. Let your Matter be set in Digestion on warm Sand for the Space of two Days, and remember to shake the Matrafs frequently. Suffer the Coral to settle to the Bottom, and pour gently the clear Liquor off. Pour on as much distil'd Vinegar as before on the Residue, and let it be two Days more in Digestion. Separate again the clear Liquor, and continue the pouring on more distil'd Vinegar, and to draw off that impregnated, till the Coral be almost wholly dissolv'd: Then mix all the Liquors, which were drawn off, together; and put them into a Glafs Cucurbit, or a Stone Vessel: Let two Thirds of the Moisture evaporate by a Sand-heat, or till there appears on the Top a fine thin Pellicule. Filtre this impregnated Liquor, and keep it to make the Salt and Magistery. It will have a greenish Colour, and an insipid Taste.

It may be administer'd on all Occasions where the Salt is us'd. A Dose of it may be from ten to twenty Drops in any proper Liquor.

#### R E M A R K S.

Red Coral is most commonly used, because People are of Opinion, that the Colour adds to its Virtue. The Dissolution which is made, when the Vinegar penetrates into the Coral, is commonly rank'd amongst the cold Effervescences, or Ebullitions; but I have known, by the Help of a Thermometer, that it had a little Heat. 'Tis surprizing, indeed, that so great an Agitation and Ebullition of the Parts should not cause some sensible Heat; but it ought to be considered, that the Coral having very large Pores, it may be easily dissolv'd; and consequently there cannot be so great a Collision betwixt the Particles of the Coral and the Acids, as would be necessary for raising any considerable Heat.

In this Operation, some, instead of Vinegar, make use of the acid Washings of Butter of Antimony, or the pure Spirit of Vitriol, or the Spirit of Copper; but as these Spirits impart a great deal of Acridness to the Preparations of Coral, I think it far better, in this Case, to make use of distil'd Vinegar, which is but a weak Acid, and incapable of communicating any injurious Impression.

As Coral is an Alkali, the acid Points join with it, and, keeping its Parts suspended, render them imperceptible. For the same Reason the Vinegar entirely loses its Acidity, which consisting only in the Motion and Activity of its Points, these are sheathed by the Alkali. The Solution acquires no Colour, but, being filtrated, is as clear as distil'd Vinegar, and of a sweetish Taste, inclining a little to bitter.

Should we continue to throw fresh distil'd Vinegar on the same Coral, in proportion as we separate the Solution from it, there will remain nothing but a very small Quantity of argillaceous Matter, which is indissoluble by the same Dissolvent, tho' duly apply'd; but this is neglected as a thing of no Use.

If you have a mind, out of Curiosity, to distil off the humid Part of your Solution, instead of evaporating it, as was directed, you will obtain only an insipid Water, because the Acid is firmly fixed in the Coral. We evaporate this Water, because it would be of no Service, and would only weaken the Impregnation.

The Solutions of Pearls, Crabs-eyes, burnt Hartshorn, and other alkaline Substances, are perform'd after the same manner; Salts and Magisteries may also be made of them, like those of Coral.

It is here to be observed, that a Solution of these Sorts of alkaline Substances, in distil'd Vinegar, has some Smell of Spirit of Wine, and that a small Quantity of that Spirit may be drawn from it by an Alembic, and a very gentle Fire. The

Reason is, that, in the making of the Vinegar, the Acids had in a manner fixed this sulphureous Spirit; but, when they come to enter the Pores of the Coral, they are forced to abandon it, and leave it to resume its Volatility.

#### MAGISTERY of CORAL.

This Operation is perform'd on Coral first dissolv'd, and afterwards precipitated in very fine and white Particles.

Take any Quantity of distil'd Vinegar, impregnated with red or white Coral, as before described; pour it into a Phial or Matrafs, and instil therein Drop by Drop the Liquor of Salt of Tartar *per Deliquium*; there will be produc'd a *Coagulum*, which will be precipitated to the Bottom in the Form of a very white Powder. Let the clear Liquor be pour'd off by Inclination, and, washing the Powder in five or six Waters, afterwards dry it. This is what we call *Magistery of Coral*. Great Virtues are ascribed to it; it is said to comfort and strengthen the Heart, to resist Poison; and to stop a Dysentery, and all Hemorrhages. The Dose is from ten to thirty Grains, in any Liquor appropriated to the Distemper.

#### R E M A R K S.

The Name *Magistery* is given only to precipitated Substances. The Meaning of the Word is, *something very exquisite*, but oftentimes there is nothing in it extraordinary; for Magisteries are no more than Substances attenuated and divided by Solution and Precipitation. The first Chymists invented this Term for some particular precipitated Substances, but not for all; and we have now no general Idea, or establish'd Characteristic, to distinguish Magistery from Precipitate; whence they are very much confounded, and we are pleased to continue to them both the same Name, which has passed current for a long time, without troubling ourselves to inquire into the Reason. What may be said on this Subject is, first, that every Magistery is a Precipitate, but every Precipitate is not a Magistery; secondly, that Magisteries are always very white, and lighter than other Precipitates, which is the Reason why they are commonly longer in precipitating; thirdly, most of those Preparations call'd Magisteries are made from stony Substances, as Corals, Shells, Pearls, Crabs-eyes, Hartshorn, Ivory, Sulphur, Antimony, and Bismuth; and, in particular, the Magistery of Coral is call'd the *Albugo* of Coral, because of its Whiteness.

The Liquor of Tartar, which is an alkaline Salt dissolv'd, encountering with the Acid, makes it quit its Hold of the Particles of Coral, which it held suspended; so that they are precipitated by their Weight. This Precipitate is nothing but a Coral reduced to a very fine Powder by the Acids, which divide what seemed indivisible under the levigating Stone into a great Number of Particles. But we ought here to remark, that these Preparations, instead of rendering the Coral more efficacious, as is pretended, make it almost useless. This is easy to be proved, if we consider, that Coral acts no otherwise on the Body than by absorbing the Acids, and the acrimonious and salt Humours, which are the Causes of several Diseases at all times. For Example, it puts a Stop to Hemorrhages on no other account than by mollifying the pungent Salts which corrode the Membranes of the Veins, or excite Effervescences in the Blood, considerable enough to cause an Extravasation; it stops Diarrhoeas only by subduing the Acrimony of the Bile, or other Humours; and, in short, that it cures Relaxations of the Uvula, and is a Remedy for several other Disorders, is owing purely to its breaking the Force of the Ferments which support them, in the same manner as it destroys the Acid in Vinegar, or other Liquors. This being the Case, as there seems to be great Reason to believe, it is better to take the Coral without any other Preparation than what the Marble gives it, than to dissolve it by an Acid, and precipitate it into a Magistery; for the Acids or acrimonious Humours of the Body, meeting with the Magistery, and finding nothing in it to mollify or blunt their Points, will continue their Activity, and so no Effect will follow. The same may be said with regard to the Magisteries of Pearls, Hartshorn, Crabs-eyes, Ivory, and Shells, which are made after the same manner. They are, indeed, slight Absorbents, but are much less active and effectual in Diseases than the Substances themselves, with the simple Preparation of the Porphyry. Here it may be proper to observe, by the way, that, among the alkaline Substances, of which I have spoken, and which are now very much used in Medicine, Coral is the strongest Absorbent, and what appears to me of the greatest Efficacy in stopping an Hemorrhage.

There is not the least Effervescence in this Precipitation, because the acid Points of the Vinegar, being broken, have neither Strength nor Motion enough left to penetrate and disperse the Parts of the Salt of Tartar. But if the Solution of the Coral be made with a stronger Dissolvent than



Vinegar, for Instance, with Spirit of Vitriol, there will be an Ebullition in the time of Precipitation, because there will remain Activity enough in the broken Points to enter into the Pores of the alkaline Salt, and to rarefy it.

The Powder of red Coral grows whiter, in proportion to its Fineness; the Stone changes its red Colour into a pale; but the Acids dividing it yet much more, it acquires a white Colour, which can proceed only from the Disposition of the Parts, which causes different Reflexions of the Rays of Light to our Eyes.

Some, who are willing to have their Magistery of the Colour of red Coral, tinge the distil'd Vinegar, which they use for the Solution of the Coral, with dry'd red Roses.

#### SALT of CORAL.

This is a Preparation of Coral, rarefy'd and penetrated by the Acids of the Vinegar.

Take what Quantity you please of a Solution of Coral in distil'd Vinegar; put it into a Glafs Cucurbit, or a Stone Vessel, and set it to evaporate all its Humidity in a Sand-heat; there will remain at the Bottom a Salt of Coral, which keep in a Phial, well stop'd. It is given for the same Purposes as the Magistery. The Dose is but small, being from five to fifteen Grains.

#### R E M A R K S.

Coral will yield three Kinds of Salt; the first is a volatile Salt, which you obtain in a small Quantity by Distillation in a Retort; it is of a urinous Nature, and altogether like that of Salt of Hartshorn, and of animal Substances. The second Kind is a fixed Salt, obtained by Calcination and Lixivation, and nearly resembling those Salts which are got out of several terrestrial Plants by the same Method; but there is a great Probability, that this Salt is a Sea-salt, contracted by the Coral during its Growth in the Sea, and rendered porous and alkaline by Calcination. I have spoken before of these two Salts. The third Kind is the Salt of Coral, of which we are speaking, and which I just now described: It is a Coral penetrated and dissolved by an Acid, which is condensed and incorporated with it. This last is the only one in Use, under the Name of Salt of Coral, there being no Mention, in the Practice of Medicine, of the other two Salts, which, however, may be said to be true Salts of Coral. But, to return to our Operation.

In this Evaporation there only pass off the aqueous Parts, and, the Acids still adhering to the Body of the Coral, there is form'd a Kind of Salt, which in drying, provided it be not shaken, shoots into small fine Figures, chanel'd, and interlaced one within another, and representing, as it were, a small Forest of Salt, agreeable enough to the Sight. You must not think, that these Figures owe their Rise to any particular Manner of Operation; Art has no Share therein; they are form'd constantly and naturally in all Operations, whenever repeated, and as soon as the Evaporation is a third Part advanced. Part of this Salt, tho' the Fire be but small, is sublimated, and adheres to the Margin of the Vessel, and even extends itself a little over it.

I should hardly forbear persuading myself, that this Disposition of the Salt of Coral was a kind of Revivification, and that it represents, in some measure, the Branches of the Coral, whence that Salt proceeds, if I were not apprised, that Salts, obtained by the same Process, as those of Pearl, Mother of Pearl, Crabs-eyes, Hartshorn, and Ivory calcin'd, all assum'd the same Figure.

When the Solution of Coral is about two Thirds evaporated, it becomes a little turbid, and acquires a brown Colour, because the Particles of the Coral, not being extended in so great a Quantity of Liquor as before, collect themselves into Molecules of a larger Size, and more sensible to the Sight; but, towards the End of the Evaporation, the Liquor appears greenish; which Colour is not the Effect of Chance, for the same thing happens at all times, in the Preparation of this Kind of Salt of Coral. It seems to proceed from a Vitriol contained in the Coral; for I have, on another Occasion, by means of a Knife touch'd with a Load-stone, prov'd that Coral contains a considerable Quantity of Particles of Iron: Now it is well known, that Iron is form'd of a vitriolic Substance, and may be almost wholly reduc'd into a Vitriol. The same greenish Colour of the Liquor continues in the Salt of Coral, till it begin to be condensed by the Fire; and does not leave it, till it arrives at a good Degree of Dryness, when it turns white. It must be observed, that when we prepare in this manner the Salts of Crabs-eyes, Pearls, Mother of Pearl, and Hartshorn, this greenish Colour does not appear: Hence all these Substances are void of Iron Particles, and the touch'd Knife discovers none in them either before or after Calcination.

If, in order to make that Kind of Salt of Coral before described, you had taken four Ounces of Coral, well pulverized and dry'd, then wholly dissolv'd it in distil'd Vinegar by repeated Affusions, and after due Filtration evaporated it, you would have obtained five Ounces and six Drams of Salt, of a good Whiteness and Dryness; there were then incorporated in the Pores of the Coral one Ounce six Drams of the Acid of the Vinegar; but the Points are well sheath'd, for they are no longer sensible to the Taste, and the Salt has only a styptic and bitter Flavour.

Though the Preparation, just now described, be what we call the *Salt of Coral*, we must not suppose, that it is a true Salt of Coral; it is rather a Salt of Vinegar, since it is compos'd only of the Acids of Vinegar, detained and fixed in the Pores of the Coral, as in a terrestrial Substance, which only serves to incorporate them. For a Proof of this Assertion, dissolve this Salt of Coral in Water, and pour thereon Oil of Tartar *per Deliquium*, there will be formed a Magistery, that is, a Coral in Powder, the Acids of the Vinegar, which had brought it into the Form of a Salt, being broken by the Liquor of the Salt of Tartar.

If you put this Salt of Coral into a Retort, and urge it by a Sand-heat, you will obtain a Liquor simply styptic, without any considerable Acidity; which shews, that the Acids are destroy'd, and never come out of the Alkali as they enter into it; there will remain a Powder of Coral of a grey Colour, which is of no Use. *Lemery, Cours de Chymie.*

#### CORALLODENDRON.

The Characters are,

It hath the Appearance of a Tree: The Leaves, for the most part, consist of three Lobes: The Flowers are papilionaceous: The Standard, or Vexillum, is long, and shap'd like a Sword: The Wings on each Side, and the Keel, or Carina, are very short: The Flowers are succeeded by knobbed bivalve Pods, which contain several Kidney-shap'd Seeds.

*Boerhaave* mentions two Species of this Plant.

1. *Corallodendron*; triphyllon; Americanum; spinosum; flore ruberrimo. *T.* 661. *Arbor Coral.* *H. A.* 1. 211. *Coral, Arbor, filiquosa.* *J. B.* 1. 426. *Siliqua, sylvestris, spinosa, Arbor Inda.* *C. B. P.* 402. *Arbuscula Coralli.* *Ferrar.* *Flor.* 381. *Coral, Arbor.* *Clus. App.* 1. *H. Prægn. The three-leav'd AMERICAN CORAL-TREE, with deep-red Flowers, commonly call'd in America THE BEAN-TREE.*

2. *Corallodendron*; triphyllon; Americanum; minus; spinis & seminibus nigricantibus. *T.* 661. *Coral, Arbor, filiquosa, minor, spinis & seminibus nigricantibus.* *H. L.* 189. *H. Prægn. Lesser three-leav'd AMERICAN CORAL-TREE, with blacker Seeds and Spines.* *Boerb. Ind. alt. Vol.* 2.

*Boerhaave* says, that the Virtues of these Trees are not yet discovered; but *Ray* has the following Particulars relative to the Medicinal Uses of the first.

The Inhabitants of *Malabar* make Sheaths of the Wood for their Swords and Knives. They use the same, together with the Bark, in washing a sort of Garments which they call *Saraffar*, and make of the Flowers the Confection *Caryl*. The Leaves pulverized, and boiled with the mature Nux Indica, or Coco-nut, consume Venereal Bubbles, and ease Pains of the Bones; bruised, and applied to the Temples, they cure the Cephalæa, and Ulcers: Mixed with the Sugar called *Jagra*, they mitigate Pains in the Belly, especially in Women; and the same Effect follows from the Use of the Bark, levigated with Vinegar, or swallowing the Kernel, stript of its red Pellicle: The Juice of the Leaves, taken with the Oil *Sergelim*, mitigates Venereal Pains; drank with an Infusion of Rice, it stops Fluxes; made into a Cataplasm, with the Leaves of *Beteleira*, it destroys Worms in old Ulcers; and, worked with Oil, it cures the Pfora and Itching. *Raii Hist. Plant.*

#### CORALLOIDES.

The Characters are,

It is a dry juiceless Substance, harder than that of the *Lichen*, brittle, ligneous. In Shape it pretty well resembles Corals, being ramous, and furnished with Apices. On the Apices of the Tops of the Branches grow fungous Tubercles, opening when mature, caducous, and full of a very small slender Seed.

Of this *Boerhaave* mentions nine Species.

1. *Coralloides*; cornua cervi referens, corniculis brevioribus. *T.* 565. *Muscus Coralloides, saxatilis, cornua Cervi referens.* *C. B. P.* 361. *Lithobryon coralloides.* *Col.* 2. 83. *Musco-fungus montanus, corniculatus, minor.* *M. H.* 3. 632. *Muscus corniculatus.* *J. B.* 3. 767.

2. *Coralloides*; cornua cervi referens, corniculis longioribus. *T.* 565. *Musco-fungus, montanus, corniculatus, major.* *M. H.* 3. 632. *Seet.* 15. *T.* 7. 1. *Muscus ceranoïdes, major.* *C. B. P.* 361.

3. *Coralloides*; qui musco-fungus; ceranoïdes; albus; tuberculatus; apicibus nigris. *M. H.* 3. 633. *Muscus ceranoïdes, albus, fungosus, apicibus nigris.* *Plukn. Phyt. T.* 205. *F.* 6.

4. *Coral.*



4. Coralloides; qui musco-fungus; coralloides; montanus; ramosissimus; fuscus. *M. H.* 3. 633.

5. Coralloides; corniculis candidissimis. *T.* 565.

6. Coralloides; candida; ramosissima; exigua.

7. Coralloides; candida; ramosissima; mollis.

8. Coralloides; candida; ramosissima; mollis; capillaris.

9. Coralloides; candida; ramosissima; mollissima; filis pilo tenuioribus. *Bœrh. Ind. alt. Plant. Vol. 1.*

*Coralloides; fruticosa; planta; marina; rectior*, is the *Titanokeratophyton*; *quod Lithophyton; marinum; albicans.*

*Coralloides; granulosa; alba*, is the *Titanokeratophyton*; *quod Lithophyton; cortice verrucoso, albo.*

*Coralloides, minor, bulbifera*, is the *Dentaria; heptaphyllos; baccifera.*

These are all call'd *Coralloides*, from their Resemblance to *Coral*. Their Virtues in Medicine are not much celebrated; but they are, however, said to be strengthening and astringent: **CORAX**, κῠραξ. The Raven. See **CORVUS**.

**CORBATUM**, Copper. *Johnson.*

**CORCHORUS** *Plinii*, C. B. *Corchorus sive Melocia*, J. B. Park. *Melochia*, Alpin. *Corchorus*, Ger. *Olus Judaicum nonnullis.*

It has a smooth Stalk, a Cubit in Length; Leaves pretty like the *Cynocrambe*, or Mercury, but larger. The Pods hang each by a short Pedicle, and are four or five Inches long, mark'd with yellowish Striæ, mucronated, quinquefid lengthwise, and containing a copious, Ash-colour'd, angulous, small Seed, of a viscid Taste. The Flowers, as *Alpinus* informs us, are small, yellow, less than those of the *Leucoia*, and consisting of five broad, short; mucronated Petals. The Plant is a Native of *Egypt*.

There is no sort of Food more common or grateful to the *Egyptians* than this Plant, for they boil it in Water; or in Broths; but many find themselves ill, after eating it; for it is of little Nourishment, and generates a viscid Juice, so that they who frequently eat it are subject to difficult Obstructions. Of this we are assured by *Veslingius*, who says, that a Dish prepared of boil'd *Melochia* is fit only for vulgar and coarse Palates, viscid, and, besides, insipid, if it be not season'd, as usual, with Juice of Lemons. The Seeds are very much used by the *Egyptians*, for all the Purposes for which the Seed of *Althæa* is recommended; for its Mucilage has a greater Viscidity than that of *Althæa*: Two Drams of it, taken, purge all Humours abundantly. The Decoction of the whole Plant, but especially of the Leaves, is beneficial to the Breast, by moistening it; for which Reason, being taken with Sugar-candy, it is a present Remedy for rough and dry Coughs. *Raii Hist. Plant.*

**CORDA**, or **CHORDA**, from χορδή, a Chord of a musical Instrument. A **CHORDEE**, which see.

**CORDIALIA**. See **CARDIACA**.

**CORDINEMA**. See **SCORDINEMA**.

**CORDOLIUM**. The Heart-burn.

**CORDOSUM FILUM**. A contorted Thread.

**CORDYLA**, κορδύλη. A Name for the *Thunnus*, Tunny Fish. See **THUNNUS**.

**CORE**, κῠρον. The Pupil of the Eye.

**COREMATA**, κορηματα. Brushes or Besoms. But, in *Paulus Aegineta*, κορηματα imports Medicines for cleaning and smoothing the Skin.

**CORIANDRUM**, Coriander.

The Characters are,

It hath a fibrose perennial Root. The lower Leaves are broad; but the upper Leaves are deeply cut into fine Segments. The Petals of the Flower are unequal, and shaped like a Heart. The Fruit is composed of two hemispherical (and sometimes spherical) Seeds.

1. *Coriandrum; majus*. *C. B. Pin.* 158. *Tourn. Inst.* 316. *Elem. Bot.* 266. *Boerb. Ind. A.* 59. *Coriandrum*, *Offic.* J. B. 3. 89. *Chab.* 295. *Raii Hist.* 1. 470. *Synop.* 3. 221. *Ger.* 859. *Emac.* 1012. *Coriandrum vulgare*, *Park. Theat.* 918. **CORIANDER**.

The lower Leaves of *Coriander* are a little like Parsley-leaves, roundish, and crenated about the Edges. The Stalks are smooth, round, and striated, beset with longer, narrower, and finer Leaves than those below, arising to be two or three Foot high, bearing, at the Top, Umbels of small white five-leaved Flowers, which falling away, there follow, in their Places, round, perfectly spherical, striated Seed. The whole Plant, whilst green, has a nauseous ungrateful Smell, like Bugs; but the Seed, when dry, is of a pleasant agreeable Scent.

It is generally sown for the Benefit of the Seed, tho' it is found in various Places, flowering in *June*; and the Seed, which is the only Part used, is ripe in *July* and *August*.

They are grateful and strengthening to the Stomach, help Digestion, expel Wind, and are frequently used as Correctors in strong purging Medicines. Some commend them as good against the King's-evil. *Miller's Bot. Off.*

2. *Coriandrum; minus; testiculatum*. *C. B. P.* 158. *M. H.* 3. 269. **SMALLER TESTICULATED CORIANDER**.

3. *Coriandrum; sylvestre; foetidissimum*. *C. B. P.* 158. *a. Boerb. Ind. alt. Plant. Vol. 1.*

Botanists and Physicians are not agreed as to the poisonous Quality of *Coriander*. *Dioscorides* writes, that, being drank, it causes Hoarseness, with a Disturbance of the Brain and Reason, like what is excited by excessive Drinking of Wine. According to *Simeon Sethi*, the Juice, drank, is a mortal Poison, and makes the whole Body smell of *Coriander*. Many also of the *Arabians* have ascrib'd to *Coriander* a cold narcotic Quality, producing a Stupor, Disturbance of the Senses, and fatal Disorders. With these agrees *Matthiolus*, who writes, that the Seed ought never to be used in Food or Medicine, unless after three Days Maceration in Vinegar. *Tragus* also charges the Apothecaries to sell this Seed to no Person, no not with Sugar, before it is prepared in the aforesaid Manner, if they intend not to give Poison instead of a Remedy.

On the contrary, *Lobel* and *Alpinus* assure us, that the *Egyptians* very commonly use the green Herb in Food. However, *J. Bauhine* is of Opinion, that we ought to be cautious in the Use of this Plant, especially if unprepared; because of the malignant Quality which some, doubtless from Experience, have ascribed to it. The extraordinary rank and noisom Smell which it yields, upon rubbing it with the Fingers, argues a Malignity; and tho' the *Spaniards*, as we are inform'd by *Amatus*, very frequently use it, and look upon it as a Cordial, yet Experience has shewn, that many *Spanish* Monks have lost their Reason by the Use of this Herb, for the Cure of whom so many Hospitals are erected; and this might also be the Case, says *C. Hoffman*, in *Egypt*, tho' *Alpinus* did not observe it.

The Seeds, incrufted in Sugar, or *Coriander-comfits*, are very much used by us, in *Germany*, says the fore-mention'd *Hoffman*, to help Concoction; for they have something of Astringency, which is also the Reason why they are of Service in Spitting of Blood, and in Fluxes of the Belly; but, in these Cases, we commonly give it torrefy'd; as we do also with an Intent to destroy Worms. But I would advise those who are subject to be too venturous, not to use it very often; nor unprepared; for, tho' possibly the Seeds may have very little excrementitious Humidity, they are not wholly destitute of it. *C. Hoffman.*

The Seeds bruised, and sprinkled upon recent raw Flesh, prevent it from putrefying so soon as it would otherwise do, in the Summer-season, if we may believe *Matthiolus*.

**CORIANON**. The same as **CORIANDRUM**.

**CORIARIA**, *Myrtle-leaved Sumach*, vulgo.

The Characters are,

It hath a Flower composed of ten Stamina, (or Threads) each having two Apices; these arise from the Bottom of the Calyx, which is divided into five Parts to the Base. When the Flower is pass'd, the Pointal (which is contain'd in another Cup, divided also into five Parts to the Base) becomes (jointly with the Cup) a Fruit, containing five Kidney-shaped Seeds.

We have but one Species of this Plant, which is,

*Corlaria vulgaris*. *Mem. Acad. Scien. Ann.* 1711. **MYRTLE-LEAVED SUMACH**, vulgo.

This Plant is used by the Tanners, for dressing their Leather, in the South of *France*, where it grows wild, in great Plenty. *Miller's Dictionary, Vol. 2.*

**CORINDUM**.

The Characters are,

It hath a trailing Stalk, emitting Claspers, whereby it fastens itself to whatever Plant it stands near. The Calyx (or Flower-cup) consists of three Leaves. The Flowers consist of eight Leaves, and are of an anomalous Figure. The Ovary becomes a Fruit, which is like a Bladder, and divided into three Cells, in which are contain'd round Seeds, in form of Peas, of a black Colour, having the Figure of a Heart, of a white Colour, upon each.

*Bœrhaave* mentions two Species of this Plant.

1. *Corindum; folio ampliori; fructu majore*. *T.* 431. *Pisum; vesicarium, fructu nigro, albâ maculâ notato*. *C. B. P.* 343. *Halicacabum peregrinum multis, sive Cor Indum*. *J. B.* 2. 173. *Halicacabus peregrina*. *Dod.* p. 455. *Pisum cordatum*. *H. Eyf. Aët.* o. 13. f. 11. 1. & vulgo. *a.* **HEART-PEA, WITH LARGE LEAVES AND FRUIT.**

2. *Corindum; folio, & fructu, minore*. *T. a.* **HEART-PEA, WITH SMALL LEAVES AND FRUIT, CALL'D BY THE INHABITANTS OF THE WEST-INDIES WILD PARSLEY.** *Boerb. Ind. alt. Plant. Vol. 1.*

The *Corindum* is said to be used as an emollient Herb, boil'd as Food. The Seeds, which are a sort of Pea, are also boil'd and eaten.

**CORINTHIACÆ UVÆ**. See **UVÆ PASSULÆ MINORES**.



**CORIS**, Offic. *Coris lutea*, C. B. Pin. 280. *Coris Matthioli*, Ger. Emac. 544. Park. Theat. 570. *Coris legitima Gretica Belli*, Ejusd. *Hypericoides*, *Coris quorundam*, & *Coris legitima*, *Gretica*, J. B. 3. 384. Chab. 456. Raii Hist. 2. 1018. *Hypericum seu Coris legitima Ericæ similis*, Hist. Oxon. 2. 469. *Hypericum saxatile tenuissimum & Glaucifolium*, Elem. Bot. 322. Tourn. Infl. 255. **BASTARD SAINT JOHN'S-WORT.**

The Seed provokes Urine, and the Menfes; and, taken in Wine, is good against the Bite of the *Phalangium*, (a poisonous Spider) and for that Species of Convulsion call'd *Opisthotonos*. Oil also, impregnated with this Plant, is good for the last-mention'd Disorder, apply'd externally. *Dioscorides*, L. 3. C. 174.

**CORIUM**. The Skin. See **CUTIS**.

**CORNEA TUNICA**. A Coat of the Eye thus call'd. See **OCULUS**.

**CORNELUS**, or **CORNEOLUS**. See **CARNEOLUS**.

**CORNESTA**. A Retort.

**CORNICULA**. An Instrument made of Horn, almost in the Form of a Cupping-glass, except that, at the more slender Extremity, there is a small Perforation. The wide End is laid upon emaciated Parts, and a Person, applying his Mouth to the Perforation at the small Extremity, by Suction draws out the Air: In consequence of this, the Part cover'd rises into the Hollow of the Instrument; and by this means the nutritious Juices are thought to be invited to the emaciated Part. *Hil-danus*, Cent. 1. Obs. 80. relates a Cure perform'd by this Means, and gives a Figure of the Instrument. *Tulpius*, L. 3. Obs. 49. gives another Instance of a Cure perform'd by this Means.

The Instrument was, by the Antients, esteem'd a Species of Cupping-glass.

**CORNICULARIS PROCESSUS**. The same as **CORACOIDES**.

**CORNICULATÆ PLANTÆ** are Plants which produce many distinct horn'd Seed-pods, call'd *Siliquæ*. *Miller's Dictionary*.

**CORNIX**, Offic. *Schrod.* 5. 317. *Bellon. des Oyse.* 282. *Will. Ornith.* 83. *Raii Ornith.* 122. *Ejusd. Synop. A.* 39. *Gesn. de Avib.* 281. *Cornix nigra*, *Aldrov. Ornith.* 1. 736. *Corvus*, *Jonf. de Avib. Tab.* 16. *Mer. Pin.* 171. *Corvus minor*, *Charlt. Exer.* 75. **THE CARRION-CROW.**

The Dung of the Carrion Crow, taken in Wine, is recommended for the Cure of a Dysentery.

**CORNU**. A Horn. That of the Male Deer, commonly call'd *Hartshorn*, is most frequently used in Medicine; the Uses of which are specify'd under the Article **CERVUS**, together with the Analysis of Horns in general; which, under the Article **ALCALI**, is, by Mistake, promised under the Article **CORNU**.

For an Account of the Analysis of Hartshorn, by Boiling, see **ALIMENTA**.

**CORNU MONOCEROTIS**. See **MONOCEROS**.

**CORNU RHINOCEROTIS**. See **RHINOCEROS**.

**CORNU CERVI**, in Chymistry, is the Beak of an Alembic.

**CORNU CERVI**, in Botany, is a Name of some Plants. Thus,

**CORNU CERVI ALTERUM REPENS** is the *Nasturtium sylvestre*; *capfulis*; *criflatis*.

**CORNU CERVINUM** is a Name for the *Coronopus hortensis*.

**CORNUA Uteri**. In comparative Anatomy, the Horns of the Womb; for the Womb is so divided in some Quadrupeds, as to form Corners resembling Horns.

**CORNUA** also imports horny Excrescences, which sometimes arise on some Parts of the Body.

**CORNUE**, in *French*, is a Retort.

**CORNUMUSA**. A Retort.

**CORNUS**. The Name of a Tree.

The Characters are,

The Calyx (or Flower-cup) consists of four small rigid Leaves, which are expanded in form of a Cross; from the Centre of which are produced many small yellowish Flowers, each consisting of four Leaves, which are disposed almost in form of an Umbrella. These Flowers are succeeded by Fruit, which are oblong, or of a cylindrical Form, somewhat like an Olive, containing a hard Stone, which is divided into two Cells, each containing a single Seed.

*Cornus*; *hortensis*; *mas*, C. B. Pin. 447. *Tourn. Infl.* 641. *Elem. Bot.* 502. *Boerb. Ind. A.* 2. 256. *Jonf. Dendr.* 88. **CORNUS**, Offic. *Chab.* 14. *Cornus mas*, Ger. 1282. *Emac.* 1466. *Park. Theat.* 1520. *Raii Hist.* 2. 1537. *Cornus hortensis mas*, C. B. Pin. 447. *Tourn. Infl.* 641. *Elem. Bot.* 502. *Boerb. Ind. A.* 2. 256. *Jonf. Dendr.* 88. *Cornus vulgaris*, *Rupp. Flor. Jen.* 72. *Cornus sativa sive domestica*, J. B. 1. 210. **THE CORNELIAN CHERRY.**

This Tree is usually of the Bigness of an ordinary Cherry-

tree, with Leaves somewhat alike; but broader, smother, and not serrated about the Edges. The Flowers grow in Clusters, being small and yellow. The Fruit is longish, of a cylindrical Shape, about as big as a *Lucca Olive*, of a red Colour when ripe, including a long hard Stone. It is of a sweet, but somewhat astringent Taste. It grows in Gardens, and flowers in *March* and *April*; but the Fruit is not ripe till *September*.

The Fruit of the Cornel-tree is cooling, drying, and astringent, strengthens the Stomach, stops all kinds of Fluxes and Looseness, and is good in Fevers, especially if attended with a *Diarrhœa*.

The only official Preparation of this Fruit is the *Rob de Cornis*. *Miller's Bot. Off.*

The Leaves of the Cornelian-cherry are very bitter: The Fruit is sour, styptic, and gives as lively a Red to blue Paper as Alum, which gives us room to think, that it contains a Salt analogous to it. Thus it is no Wonder, that *Hippocrates*, *Dioscorides*, and *Pliny*, believed this Fruit to be good to stop a Looseness. *Ruellius* says, that they preserve it, for this Disorder, in Bottles of Honey or Syrup. An Electuary is made of the strain'd Pulp for a Dysentery, and to restore the Appetite. To make a Wine of Cornelian-cherries, *J. Baubine* advises to put ten Pounds of these Fruits into fifty Quarts of good red Wine, mix'd with six Quarts of Steel Wine: Let the Whole ferment a Fortnight; after which draw it out, and keep it in Bottles for a Looseness. The dry'd Cornelian-cherries are used in cooling and astringent Ptisans. They are preserved with Sugar; and a Marmelade is made of them. *Martyn's Tournefort*.

**ROB DE CORNIS**: *Rob of Cornelian-cherries.*

Take one Pound of wild Cherries, and macerate them in a sufficient Quantity of Spring-water, till the Pulp can be pass'd thro' a Sieve: Then evaporate the superfluous Humidity; and, with half a Pound of fine Sugar, boil it up to a due Consistence.

2. *Cornus*; *fœmina*. C. B. P. 447. *Lob. Ic.* 169. **THE DOG-BERRY, OR GATTEN-TREE.**

The Fruit of the *Cornus fœmina* is very bitter, styptic, and gives a pretty deep-red Colour to blue Paper. *Tournefort*.

3. *Cornus*; *fœmina*; *foliis variegatis*. H. L. **THE STRIPED DOGBERRY-TREE.**

Besides these, *Miller* takes notice of the

*Cornus*; *fœmina*, *Laurifolia*, *fructu nigro cœruleo*, officulo compresso, *Virginiana*. *Pluk. Almag.* **THE VIRGINIAN DOGBERRY-TREE.** And the

*Cornus*; *mas*; *odorata*, *folio trifido*, *marginè plano Saffra-fras dicta*. See **SASSAFRAS**. And five other Species in the second Volume of his Dictionary.

**CORNUTA**. A Retort, so call'd on account of its Shape.

**CORNUTIA**. A Plant, so call'd from *Cornutus*, a Physician of *Paris*, who publish'd a History of *Canada* Plants. We have no *English* Name for this Plant.

The Characters are,

It hath a monopetalous personated Flower, whose upper Lip stands erect, but the under Lip is divided into three Parts; from the Flower-cup arises the Pointal, which is fixed like a Nail in the hinder Part of the Flower, which afterward becomes a spherical succulent Berry, including Seeds, which are, for the most part, Kidney-shap'd.

There is but one Species of this Plant yet known; which is,

*Cornutia flore pyramidato cœruleo, foliis incanis*. *Plum.* **CORNUTIA WITH A PYRAMIDAL FLOWER, AND HOARY LEAVES.** *Miller's Dictionary*, Vol. 2.

**COROCRUM**. A Ferment.

**COROLLA**. The Petals of Flowers.

**CORONA**. A Crown, in Botany, is a Series of small Beards, or Rays, in Discoide Flowers. *Rieger*.

**CORONA IMPERIALIS**.

The Characters are,

The Flower is Bell-shap'd, and hexapetalous; the Petals being furnished on the Inside of the Unguis with a Cavity, containing a Liquor as sweet as Honey; it is also pendulous, naked, provided with six Stamina, contains an Ovary, and is disposed into the Form of a Crown, under a foliaceous Crown and *Coma*. The Ovary becomes an oblong winged Fruit, containing flat Seeds, placed upon one another: From the Centre of the Apex proceeds a long Tube, furnished with a trifid Top: The Leaves are like those of the Lily, and grow in Circles round the Stalk; the Root consists of Coats, and is furnished with Fibres at the Bottom.

*Boerhaave* take notice of thirteen Species of this Plant.

1. *Corona Imperialis major*. T. 372. *Lilium, sive Corona Imperialis, per omnia major*. H. R. Par. 106. **THE GREATER CROWN IMPERIAL.**

2. *Corona*



2. Corona Imperialis; *Dod. p. 202. H. Eyf. Vern. d. 5. F. 2. Fig. 1. Lilium, five Corona Imperialis. C. B. P. 79. M. H. 2. 406. Tufai, five Lilium Perficum. Cluf. H. 127. THE COMMON CROWN IMPERIAL.*

3. Corona Imperialis; folio vario. *T. 372. Lilium, five Coronâ Imperialis, Sinensium, seu folio vario. H. R. Par. 107. Lilium Imperiale, seu Corona Imperialis, foliis variegatis. M. H. 2. 407. STRIP'D-LEAV'D CROWN IMPERIAL.*

4. Corona Imperialis; folio vario ex viridi & argenteo. **SILVER STRIP'D-LEAV'D CROWN IMPERIAL.**

5. Corona Imperialis; duplici Coronâ. *T. 372. Lilium five Corona Imperialis, duplici Coronâ. C. B. P. 79. M. H. 2. 407. CROWN IMPERIAL WITH A DOUBLE CROWN.*

6. Corona Imperialis; triplici Coronâ. *C. H. L. Schuyt. CROWN IMPERIAL WITH A TRIPLE CROWN.*

7. Corona Imperialis; multiflora; latoque caule. *T. 372. Lilium, five Corona Imperialis, multiflora, latoque caule. C. B. P. 79. M. H. 2. 407. Tufai πολυανθέε. Cluf. CROWN IMPERIAL WITH MANY FLOWERS, AND FLAT STALKS.*

8. Corona Imperialis; flore pleno. *T. 373. Lilium, five Corona Imperialis, flore pleno. H. R. Par. CROWN IMPERIAL WITH A DOUBLE FLOWER.*

9. Corona Imperialis; flore pulchrê luteo. *T. 372. Lilium, five Corona Imperialis per omnia major, flore luteo. H. R. Par. CROWN IMPERIAL WITH A BEAUTIFUL YELLOW FLOWER.*

10. Corona Imperialis; flore luteo pleno. **CROWN IMPERIAL WITH A DOUBLE YELLOW FLOWER.**

11. Corona Imperialis; flore luteo striato. *T. 372. & H. Edinb. CROWN IMPERIAL WITH A YELLOW STRIP'D FLOWER.*

12. Corona Imperialis pulcherrima; flore ex aureo & aurantio striato.

13. Corona Imperialis; ramosa. *T. 373. Lilium, five Corona Imperialis, ramosa. C. B. P. 79. M. H. 2. 407. Tufai δίκλων. Cluf. H. 128. BRANCH'D CROWN IMPERIAL. Boer. Ind. alt. Plant. Vol. 2.*

The Whole of the Corona Imperialis is poisonous.

Upon the inferior Part of the Petals, certain white limpid Drops of Liquor are found, which resemble a Pearl, and are sweet. These are used by the *Turks* as an Emetic; and by others, as an Eclectic.

**CORONA REGIA.** The Herb Melilot. *Blancard.*

**CORONA TERRÆ.** The *HEDERA TERRESTRIS.* Ground-ivy. *Blancard.*

**CORONA SOLIS.**

The Characters are,

The Flower is radiated like that of the *Aster*, but is larger; the Cup is squamous; the Embryos of the Seeds are distinguished by little imbricated Leaves in the Disk; the Top of the Ovary is crown'd with two small Leaves, betwixt which the Flower grows upon the Ovary; the Seeds are push'd out from the Bottom of the Flower, leaving a Vacuity, which appears very like a Honey-comb.

*Boerhaave* mentions eighteen Species of this Plant; which are,

1. Corona Solis, *Tabernæmontani. Elem. Bot. 391. Tourn. 489. Boerb. Ind. A. 102. Flos Solis. Offic. Raii Hist. 1. 314. Flos Solis major. Ger. 612. Emac. 751. Chrysanthemum Peruvianum five Flos Solis. Park. Parad. 295. Chrysanthemum Indicum, Flore & semine maximis annuum. Herm. Hort. Lugd. Bat. 142. Pluk. Almag. 98. Chrysanthemum Indicum maximum annuum, non ramosum. Hist. Oxon. 3. 19. Helenium Indicum maximum. C. B. 276. Herba maxima. J. B. 3. 107. Herba maxima, Sol Indianus. Chab. 360. Chimalath Peruviana, Flos Solis. Hern. 228. SUN-FLOWER. Dale.*

It is a Native of *Peru*, and other Countries of *America*, but is cultivated with us in Gardens for the sake of Ornament. What are its Virtues, says *Cæsalpinus*, was never yet declared; though we may conjecture, that it is of a heating Quality, and of fine Parts, and therefore effectual to the same Purposes as *Helenium*; but its Tear is by far the most efficacious Part of it. *Fragoso*, in *Clusius*, speaks more fully of its Uses; where he says, "It is a kind of Oulus, or esculent Green, and tastes well; the Leaves, therefore, being cleared of their Pedicle, and their rough Hairs deterged with a Cloth, may be eaten; for which Purpose they are first cut, then sprinkled with Oil, Salt, and Spices, and afterwards boiled in an earthen Pot, making a Dish not ungrateful to the Palate. The Fruit also, or the Head, while it is tender, having its downy Part taken off, which covers the Seed, as it is in a Artichoke, is much more pleasant Food than any *Carduus*. It is proved, by Experience, that this Plant, especially the Head, is a potent Incentive to *Venery*. It is highly to be valu'd, as it produces a resinous Tear, and delicate Gum, and is both Meat and Drink. It is so full of Moisture, that the little tender Pedicles, which sustain the Leaves, being chewed, afford a copious Juice, and the thick and knotty

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Stalk serves very well for Firing; for its resinous Liquor, and ferulaceous Hollowness, make it burn like a Torch." Because the Stalk is very soon cover'd with a Callus after it is broken, it is conjectur'd to be of the Number of vulnerary Plants, on account of the terebinthinaceous balsamic Liquor with which it abounds. *Etzmüllerus*, *T. 1.* says, that the Seed-vessel, taken when the Seeds are almost ripe; and cut, and boiled, affords a copious Gum, which, reduced into the Form of a Plaister, is extol'd as a most singular Vulnerary: The Pulp of the Seeds is sweet, and greedily coveted by Birds, which are fatten'd by it. According to *Hernandez*, the Seeds, though they excite an Head-ach, when eaten too freely, yet they are lenitive to the Breast, and extinguish burning Heats. In some Countries they are bruised, and made into Bread, serving instead of Corn; though some say they prove Incentives to *Venery*. *Rieger.*

2. Corona Solis; maxima; semine albo, cinereo, & striato. *T. 489. GREAT ANNUAL SUN-FLOWER, WITH ASH-COLOUR'D STRIP'D LEAVES.*

3. Corona Solis; maxima; flore pallidè sulphureo, fere albo; semine nigro. *An Chrysanthemum, majus, alterum, sulphureo magno flore. H. R. Par. a. GREAT ANNUAL SUN-FLOWER, WITH PALE BRIMSTONE-COLOUR'D FLOWERS, AND BLACK SEEDS.*

4. Corona Solis; maxima; flore pleno, aureo; semine nigro. *a. GREAT ANNUAL SUN-FLOWER, WITH DOUBLE YELLOW FLOWERS, AND BLACK SEEDS.*

5. Corona Solis; maxima; flore pleno, aureo; semine albo. *a. GREAT ANNUAL SUN-FLOWER, WITH DOUBLE YELLOW FLOWERS, AND WHITE SEEDS.*

6. Corona Solis; maxima; flore pleno, sulphureo; semine nigro. *a. GREAT ANNUAL SUN-FLOWER, WITH DOUBLE BRIMSTONE-COLOUR'D FLOWERS, AND BLACK SEEDS.*

7. Corona Solis; maxima; flore pleno, sulphureo; semine albo. *a. GREAT ANNUAL SUN-FLOWER, WITH DOUBLE BRIMSTONE-COLOUR'D FLOWERS, AND WHITE SEEDS.*

8. Corona Solis; ramosa; perennis. *Helenium, Indicum, ramosum. C. B. P. 277. Chrysanthemum, Indicum, perenne, flos solis, minor. Flor. 2. 45. Flos Solis, prolifer. H. Eyf. Æst. o. 5. F. 2. Fig. 1.*

9. Corona Solis; parvo flore; tuberosa radice. See *BAT-TATA CANADENSIS.*

10. Corona Solis; latifolia; altissima. *T. 489.*

11. Corona Solis; latifolia; humilior; *Canadensis.*

12. Corona Solis; Rapunculi Radice. *T. 490. Helenium Canadense, altissimum, Vosacan dictum. H. R. P. 85.*

The Roots of this are bitterish, but not ungrateful. They are used in *Canada* as Food.

13. Corona Solis; altissima; Virgæ aureæ foliis. *T. 490. TALLEST PERENNIAL SUN-FLOWER, WITH GOLDEN-ROD-LEAVES.*

14. Corona Solis; arborea; folio latissimo platani. *Doronicum, maximum, Americanum, latissimo anguloso folio, radice transparente. H. L. 222. TREE-LIKE PERENNIAL SUN-FLOWER, WITH A BROAD PLANE-TREE-LEAF.*

15. Corona Solis; foliis amplioribus laciniatis. *T. 490. Doronicum, Americanum, laciniato folio. C. B. P. App. 516. PERENNIAL SUN-FLOWER, WITH LARGE DIVIDED LEAVES.*

16. Corona Solis; foliis angustioribus; laciniatis. *T. 490. Aconitum, Helianthemum, Canadense. Corn. 179. PERENNIAL SUN-FLOWER, WITH NARROW DIVIDED LEAVES.*

17. Corona Solis; altissima; caule alato. *T. 490. Helenium Canadense, elatius, alato caule. H. R. P. 85.*

18. Corona Solis; salicis folio; alato caule. *T. 490. WILLOW-LEAV'D PERENNIAL SUN-FLOWER, WITH WINGED STALKS. Boerb. Ind. alt. Plant. Vol. 1.*

**CORONALIS SUTURA.** The Coronal Suture. See *CAPUT.*

**CORONALE OS.** The *Os Frontis*, according to *Bartholine.*

**CORONARIA VASA.** The Coronary Vessels. These are certain Vessels, which furnish the Substance of the Heart with Blood. See *COR.*

Certain Vessels in the Stomach are call'd Coronary Vessels. See *CORLIA.*

**CORONE,** κορώνη. The Carrion Crow. This Name is also given to the anterior Apophysis of the lower Jaw. See *CAPUT.*

**CORONILIA.**

The Characters are,

In Habit and Leaves it resembles the *Emerus* (*Scorpion Sena*); the Pod is composed of many Parts, join'd, as it were, by a sort of Articulation; each of which is turgid, with an oblong Seed.

5 H

*Boerhaave*



*Boerhaave* mentions eight Species of this Plant ; which are,  
1. *Coronilla* ; five *Colutea minima*. *Lob. Ic.* 87. *T.* 650. *Polygala, Valentina*. *Clus. H.* 98. *Colutea five Polygala. 1. Valentina, Clusii. M. H.* 2. 122. *Polygala, altera. C. B. P.* 349. *Colutea, parva Species, Polygala Valentina, Clusii. J. B.* 1. 383. *H.*

2. *Coronilla* ; *Hispanica* ; *frutescens* ; major. *Colutea, five Polygala altera, fruticosor, foliis latioribus. H. L.* 168. *Polygala major, Massiliotica. C. B. P.* 349. *Colutea, Scorpioides Quædani, five Polygalæ Cortusi similis planta, sed major. J. B.* 1. 382. *H.*

3. *Coronilla* ; *argentea* ; *Cretica. T.* 650. *Colutea, Scorpioides, Cretica odorata. Alpin. Exot.* 17. *M. H.* 2. 123. *H.* SILVER-LEAV'D JOINTED-PODDED COLUTEA OF CANDIA.

4. *Coronilla* ; *Zeylanica* ; *argentea tota. Colutea, Zeylanica, argentea, tota. H. L. Ic. & Deter.* 171. *H.* SILVER JOINTED-PODDED COLUTEA OF CEYLON.

5. *Coronilla* ; *minima. T.* 650. *Ferrum, equinum, Gallium, siliquis in summitate. C. B. P.* 349. *Polygonum, Cortusi. J. B.* 2. 251. *Lotus, enneaphyllos. Lugd.* 510. *Colutea, herbacea, enneaphyllos. M. H.* 2. 120. *H.* THE LEAST JOINTED-PODDED COLUTEA.

6. *Coronilla* ; *herbacea* ; *flore vario. T.* 650. *Colutea, herbacea, dumetorum, major, siliquis articulatis, flore vario. H. L. Securidaca, dumetorum, major, flore vario, siliquis articulatis. C. B. P.* 349. *Melilotus, quinta, Triagi. J. B.* 2. 349. HERBACEOUS JOINTED-PODDED COLUTEA, WITH A VARIABLE FLOWER.

7. *Coronilla* ; *Cretica* ; *herbacea* ; *flore parvo, purpurascens. T. Cor.* 44. *a.* CANDIA HERBACEOUS JOINTED-PODDED COLUTEA, WITH A SMALL PURPLISH FLOWER.

8. *Coronilla* ; *Cretica* ; *herbacea* ; *flore parvo, luteo. T. Cor.* 44. *a.* *Boerb. Ind. alt. Vol.* 2.

I find no medicinal Virtues attributed to any of these.

CORONOPUS.

The Characters are,

It agrees in Flower and Fruit with the Plantain, from which it differs in its Leaves, which are deeply cut in on the Edges ; whereas the Leaves of Plantain are either entire, or but slightly indented.

1. *Coronopus* ; *hortensis. C. B. Pin.* 190. *Tourn. Inst.* 128. *Elem. Bot.* 104. *Boerb. Ind. A.* 2. 101. *Coronopus. Offic. Coronopus vulgaris five Cornu Cervinum. Park. Theat.* 501. *Raii Hist.* 1. 879. *Coronopus five Cornu Cervinum vulgò spicâ Plantagineâ. J. B.* 3. 509. *Coronopus, Herba stella, Cornu Cervinum. Chab.* 509. *Cornu Cervinum. Ger.* 340. *Emac.* 427. *Mer. Pin.* 30. *Merc. Bot.* 1. 30. *Phyt. Brit.* 31. *Plantago foliis laciniatis Coronopus dicta. Raii Synop.* 3. 315. *Plantago Coronopus dicta sativus in acetariis utilis. Pluk. Almag.* 298. *Stella terræ vulgo. BUCKSHORN-PLANTAIN.*

This Plantain has pretty long, slender, whitish Roots, which run deep into the Ground, having many Leaves lying flat on the Earth, in a round Compass ; whence it is call'd *Stella Terræ*, or the Star of the Earth : The Leaves differ from all other Plantains, in that they are long, and very narrow, having about six slender Jags or Laciniæ on each Leaf. They are somewhat downy and hairy : The Spikes are narrow, composed as in other Plantains, of small, irregular, four-leav'd Flowers, growing on hoary Stalks, three or four Inches long. The Seed is small, of a dark-brown shining Colour. It grows in sandy Ground, and upon Heaths, and flowers in *June*.

*Buckshorn Plantain* is much of the Nature of other Plantains, being moderately drying and binding, and a good vulnerary Herb, used both inwardly and outwardly ; besides which, it is particularly commended against the Bitings of all kind of venomous Creatures, and more especially for the Bite of a mad Dog. *Miller's Bot. Off.*

2. *Coronopus* ; *maritima* ; major. *C. B. P.* 190. *Plantago angustifolia. Dod.* p. 108. *a.*

*Miller* mentions two more Species of *Coronopus*.

CORONOPUS RUELLII. See AMBROSIA CAMPESTRIS. The Name is derived from *κρόων*, a Carrion Crow, and *πῶς*, a Foot. The Plant being said to resemble a Crow's Foot.

COROS, *κῆρος*. Satiety.

COROZONE CELIO. A Name for the *Sedum* ; *Cana-rinum* ; *foliis omnium maximis*.

CORPORA NERVOSA, or NERVEOSPONGIOSA, PENIS. The nervous or nerveo-spongy Bodies of the Penis. See GENERATIO.

CORPORA OLIVARIA. Two Protuberances of the Medulla oblongata. See CEREBRUM.

CORPORA PYRAMIDALIA. Two other Protuberances near the preceding. See CEREBRUM.

CORPORA STRIATA. Two Prominences in the lateral Ventricles of the Brain. See CEREBRUM.

CORPORATIO. Incorporation.

CORPULENTIA. Corpulence.

CORPUS CALLOSUM. A medullary Part of the Brain, which covers the two lateral Ventricles. See CEREBRUM.

CORPUS GLANDULOSUM. The Prostate.

CORPUS PAMPINIFORME, PYRAMIDALE, or VARICOSUM. A Body form'd a little above the Testicles, by the Division and Reunion of the spermatic Veins. See GENERATIO.

CORRAGO. The Plant call'd BORRAGO, Borragé.

CORRÆ, or CORSÆ, *κόρραι*, or *κόρσαι*. The Temples. *Gorræus*.

CORRECTIO, Correction. This Word in Pharmacy has several peculiar Senses : And, first, drastic Medicines, or such as operate with Violence, are said to be corrected, when, in their Composition, some Ingredient is added, which proves a kind of Check or Balance to their violent Operation, or prevents the Misfortunes which they generally bring on without such a correcting Ingredient. Thus, for Instance, some Carminatives, such as the Seeds of Fennel or Anise, are added to Sena-leaves, which, when exhibited alone, generally produce Flatulences and Gripes. The Substances or Ingredients thus added, with an Intention to render the Medicines safer and less dangerous, are call'd *Corrigentia* or *Correctoria* ; as also *Castigantia*, and *Infringentia*. According to *Wedelius*, in his *Treatise de Medicamentorum Compositione extemporanea*, CORRECTORS have a Reference either to the noxious Quality, the Viscidity and Toughness, the Coldness, the narcotic Nature, the emetic Virtue, and the violent Operation, of the Medicines to which they are added. 'Tis, therefore, obvious, that Correctors must consist of such Parts, as are of an opposite Nature to those which prevail in the Substance to be corrected. Thus, for Instance, Alcalis are corrected by Acids ; Acids by Alcalis ; and Substances, of any given Nature, by those of directly contrary Qualities. The universal Correctors of Medicines, which operate too violently, are, first, Water, which dilutes Acrimony ; and, secondly, mild and balsamic Oils, which obtund and sheath up the stimulating and irritating Spicula of any Medicine. To this Species of Correction belongs also such a Preparation of Medicines as weakens or impairs their violent and drastic Operation ; when, for Instance, the Root of Arum is render'd milder and less violent in its Operation, by being macerated in some Liquor, or by being dry'd. But *Corrections* are sometimes boasted of in consequence of the Ignorance, in which Persons remain, with respect to the Natures of the Medicines to which they are added ; when, for Instance, Opium is thought to be corrected by Castor, and an Addition of other healing and aromatic Substances ; because the Antients imagin'd, that Opium prov'd prejudicial by its excessive Coldness. Thus also some Corrections are made, which rather deserve the Name of Castrations ; when, for Instance, the Seeds of Coriander or Cumin are macerated in Vinegar. In like manner, according to *Helmont*, some boil Scammony in acid Liquors with a View to correct, or render it more mild in its Operation. But every one, who is in the least versed in medicinal Affairs, knows, that when Scammony is exposed to the acid Steam of Sulphur, it is entirely divested of its Properties, and recedes from the Nature of Scammony, in proportion to the Quantity of the Acid it has imbib'd. With respect, therefore, to such Corrections, we may, with that Author, affirm, that they are made without any Knowledge of the Qualities, Parts, and mutual Relations between the Correctors, and the Substances to be corrected. It is pretty surprising, that some Substances, by Correction, should have their Qualities and medicinal Virtues directly inverted and reversed, which happens to *Afarabacca*, upon being boiled. The genuine and peculiar Correctors of each Medicine are specified under its respective Article.

Secondly, Medicines which operate in a slow and languid Manner, are said to be corrected, when they are so prepared as either to accelerate or augment their Operation ; when, for Instance, Salts are mixed with evacuating Medicines of a gum-mous and resinous Nature, that, by this means, being more resolv'd or attenuated, they may operate more powerfully. Thus, with this very Intention, Salt of Tartar, or Sal Polychrestus, are added to Infusions of Sena. Ingredients, added with this View, are call'd *Adjuvantia* : And, when more drastic Substances, of the same Virtues, are added, in order to augment the Operation of the Compositions, these additional Ingredients are call'd *Acuentia*.

Thirdly, Nauseous and ungrateful Medicines are said to be corrected, when they are prepared in such a manner as to become more acceptable and agreeable to the Palate. But, as the Sense of Taste is not the same in all Mankind, the Correctors of this Sort must necessarily vary according to the peculiar Taste of different Patients. Medicines, intended for Children, are generally corrected, or rendered grateful, by an Addition of Sugar. In like manner, Substances of an ungrateful and disagreeable Smell are to be corrected by an Addition of fragrant and well-scented Ingredients.

CORRIGIOIA. According to *Fuchsius*, in his Commentaries upon *Nichlaus Myrepsus*, is the same as *Polygonum Mar.*

COR-



**CORROBORANTIA.** Corroborative Medicines, or Remedies which impart Strength.

**CORROBORATIO.** Corroboration, or Strengthening.

**CORRODENTIA, or CORROSIVA.** Corrosives; or corroding Medicines.

These are Medicines of much Use in Surgery, which corrode whatever Part of the Body they are applied to. They consist of acrid Substances, and may properly enough be thus divided:

First, Into mild Corrosives; among which may be reckon'd burnt Alum; the Ashes of green Wood; Mercurius Dulcis; white Precipitate of Mercury, and white Vitriol.

Secondly, Into strong Corrosives; as red Precipitate of Mercury; Colcothar of Vitriol; and the *Trochisci de Minio Vigonis*, made of red Lead, half an Ounce; Corrosive Sublimate, an Ounce; Crums of Bread, four Ounces; with Rose-water, a sufficient Quantity, to make the Ingredients into Troches.

Thirdly, The strongest Corrosives, as Butter of Antimony; the Infernal Stone; Corrosive Sublimate of Mercury; Oil of Tartar *per Deliquium*, and Oil of Vitriol. With respect to these, it must be observed, that the stronger they are, the greater Caution is required in their Use.

Corrosives act by their Acrimony, by which they destroy not only foreign Substances adhering to animal Bodies, but also the Solids themselves, provided they meet with any Moisture, when apply'd to them; and particularly when confined upon the Part by any adhesive Plaster, so as to have their Action excited by the Heat of the Body. In the two first Cases they are call'd Catheterics; in the last, potential Caustics. See CAUSTICA.

Corrosives are used for opening Abscesses; for making Issues, or artificial Ulcers; for consuming Tubercles, and callous Excrescences; for separating and extirpating corrupted Parts; and cleansing fordid Ulcers; and sometimes for stopping Hæmorrhages.

Relative to the Use of Corrosives, the following Cautions are laid down by various Authors:

First, When the Disorder is not so great but that it may be subdu'd by the milder Corrosives, the stronger are never to be used, lest too much Pain should be excited, and a Flux of Humours invited to the Part affected.

Secondly, Corrosives are not proper for such Constitutions, nor such Parts of the Body, as may too readily receive an Injury by their Application; nor are they equally well adapted to all Ages. Thus they are attended with Danger, when applied to Bodies whose Humours are easily irritated; to nervous and tendinous Parts; and to Infants.

Thirdly, Corrosives are most proper in Disorders which admit of Delay.

Fourthly, When the Root or Source of the Disorder subsists within, and Corrosives are more likely to irritate and augment than to diminish it, in such Cases Corrosives are never to be used.

Fifthly, The Action of Corrosives is to be so limited, as not to injure, consume, or exulcerate the sound Parts.

**CORROSIO.** Chemical Corrosion is what we have call'd *Calcination* by potential Fire, under the Article CALX, which see. *Barchusen* defines it, a total or particular Solution of any Body by some acrid Salt.

**CORROSIVA.** Corrosives. In Chymistry, saline Menstruums. *Rieger*. See CORRODENTIA.

**CORRUDA.** See ASPARAGUS PETRÆA.

**CORRUGATIO.** Corrugation, or Wrinkling of the Skin, or any other Part.

**CORRUGATOR COITERI, or**

MUSCULUS FRONTALIS VERUS.

This Muscle arises fleshy from the Process of the Os Frontis, next the inner or great Angle of the Orbit, above the Joining of the Os Nasi and superior Process of the Os Maxillare with this Bone; from thence it runs obliquely outwards and upwards, and

is inserted into the fleshy Part of the Occipito-frontalis, some of its Fibrillæ passing through into the Skin, a little higher than the middle Region of the Eyebrows.

Its Use is to smooth the Skin of the Forehead, by pulling it down after the Action of the Occipito-frontalis; and, when it acts more forcibly, it serves to wrinkle the Skin of the Front, between the Supercilia, as it happens when we frown, or knit the Brows. *Douglas*. See CAPUT.

**CORSÆ.** See CORRÆ.

**CORSOIDES.** A Name for the AMIANTHUS LAPIS.

**CORTALON,** in *Myrepsus*, is the same as the *Senecio*, Groundsel.

**CORTEX CARDINALIS DE LUGO.** See QUINQUINA.

**CORTEX CARYOPHYLLATUS.** See CARYOPHYLLUS.

**CORTEX CULITLAVVAN,** Mont. Exot. 8. *Culilavvan*, *Ephem. Ger. Dec. 11. Anno. 1. p. 55.*

This is a hot aromatic Bark, said to be found in *New Guinea*,

but a Stranger to the *European* Shops. The same Virtues are attributed to it, as to the CORTEX MASOY. *Dale from Monti.*

**CORTEX ELATERII.** See CASCARILLA.

**CORTEX MAGELLANICUS.** See CORTEX WINTERANUS.

**CORTEX MASOY,** Mont. Exot. 8. *Ephem. Ger. Dec. 11. Ann. 1. 55.*

This is a warm aromatic Bark, said to be found in *New Guinea*, but is not known in our Shops. It is alexipharmic, opening, carminative, cephalic, cordial, and stomachic. The Inhabitants of the Country where it grows use it powder'd, and made up into a kind of Pulp with Water, for anointing their Bodies in cold and rainy Weather. It is said to warm them very much, to ease pungent Pains and Gripes, and to be of a very grateful Fragrance. *Dale from Rumphius and Monti.*

**CORTEX PERUVIANUS.** See QUINQUINA.

**CORTEX WINTERANUS SPURIUS.** See CANELLA ALBA.

**CORTEX WINTERANUS,** Offic. Park. Theat. 1652. *Cortex Winteranus, Cortex Magellanicus*, Mont. Exot. 8. *Cortex Winteranus acris sive Canella alba*. J. B. 460. *Cortex Winteranus Clusii*, Chab. 34. *Laurifolia Magellanica cortice acris*, C. B. Pin. 461. *Raii Hist. 2. 1801.* WINTER'S CINNAMON.

This Bark is now hardly to be met with, we making use of the *Canella alba*, which is generally call'd *Winter's Bark* in the Shops, in its stead. *Miller's Bot. Off.*

Capt. *Winter*, who went out with Sir *Francis Drake*, when he went round the World, at his Return, brought with him, from the Streights of *Magellan*, an aromatic Bark, which had been very useful to those of his Ship, both used instead of other Spices with their Meat, and as a Medicine very powerful against the Scurvy. *Clusius*, from this Captain's Name, call'd it *Cortex Winteranus*, and the Tree *Magellanica Aromatica Arbor*. The Writer of the Journal of the *Dutch* Ships, which went to the Streights of *Magellan* about 1599. calls it *Lauro similis Arbor, licet procerior, Cortice Piperis modo acris & mordenti*: And *Sebald de Weert*, who was there, says, that both Leaves and Bark were used with their Meat and Muskles, to correct them in so cold a Climate. *Caspar Bauhine* calls it *Laurifolia Magellanica Cortice acris*; *Johnston, Arbor Laurifolia Magellanica*.

But Mr. *George Handyside*, who came from thence some little time since, gives the best Account of it, having brought with him a Specimen or Sample of its Leaves and Flowers on the Twig, and its Seed; by which I cannot reduce it to any of our kind of Plants so well as the *Periclymenum*; and therefore I shall call it, tho' it differs in many things from the Honeysuckle, *Periclymenum rectum Foliis Laurinis, Cortice acris aromatico*.

He assured me, that this Tree rose to be higher and larger than an Apple-tree, spreading very much both in Root and Branches. The Twigs had on them Leaves of a light-green Colour on their upper Side, standing on half Inch long Foot-stalks; are an Inch and half long, and an Inch broad in the Middle, where broadest, and whence they decrease to both Ends, ending blunt. The Flowers come from the Axæ of the Leaves, standing on Stalks a Quarter of an Inch long; two, three, or more of them together, something like those of the *Periclymenum*; each of them are milk-white, pentapetalous, and smell like Jessamine; to which succeeds an oval Berry, made up of two, or three, or more Acini, or little Berries, standing together on the same common Foot-stalk, of a light-green Colour, with some black Spots; and in these Berries are contained several black aromatic Seeds, something like the Stones in Grapes.

It grows in the Middle of the Streights of *Magellan* very plentifully.

The Leaves of this Tree were used with other Herbs, by Mr. *Handyside*, for Fomentations in several Cases, with very good Success; but he admired most the Use of the Bark inwardly, boiling half a Dram of it with some carminative Seeds, and giving it to those of the Ship who were under his Care, very much afflicted with the Scurvy. It usually sweated them, and they were very much relieved. The same Medicine he likewise administered to a great many of the Ship, who were very ill by eating a poisonous sort of Seal, found in those Parts, call'd a Sea Lion; with which they had a very great Amendment, altho' they had been so ill with feeding on this Creature, as to lose most of their Skins, which peel'd off their Bodies by degrees, and in large Pieces; so that the Antidote to this strange Poison was to be had very near it, and was very much extol'd by this Gentleman, who was put to a stand to know what to do in this strange Case, altho' he very well understood the Materia Medica.

By the Description of this Tree, and that of wild Cinnamon, it appears, that the *Cortex Winteranus*, commonly sold in the Shops, is not the true *Cortex Winteranus*: But I must needs say, tho' they are the Barks of two very different Trees, and growing in very different Places, and appear quite another thing in their outward Faces, yet their Taste is much the same, and I believe they may be used as a Succedaneum, one for another; tho'



tho' the true be much to be valu'd beyond the false, being much more aromatic. By Sir Hans Sloan, in the *Phil. Trans.* abr. Vol. 2.

In order more effectually to investigate the Qualities, and discover the genuine Nature, of *Winter's Cinnamon*, we shall now take a View of the several Experiments instituted with it by *Antonius de Heide*, as related in his *Observationes Medicæ*. "Reſiſy'd Spirit of Wine," says he, "when pour'd upon this Bark, is immediately ting'd with an intensely red Colour, and impregnated with the Taste of the Bark; but Rain-water, when poured upon it, only acquires a faint-yellow Colour. A large Quantity of the Oil of Vitriol, added to the spirituous Tincture of this Bark, as yet not poured off from it, excited a violent Heat, and an Agitation of the Pieces of the Bark, which were before lying at Rest in the Bottom of the Vessel, and which had assumed a blackish Colour. Aqua-fortis, dropt into the Tincture poured off from the Bark, gave it a whitish kind of Colour, which Effect seems rather to be ascribed to the aqueous Nature, than to the Acidity of the Aqua-fortis; for Rain-water produc'd a milky Colour with this Tincture, whilst, at the same time, white Flakes subsided to the Bottom of the Vessel. Oil of Tartar per Deliquium seemed to produce no Change in the spirituous Tincture, except that by its means it assumed a brighter Colour. Salt of Tartar renders the aqueous Tincture of this Bark turbid, and precipitates a small Quantity of white Flakes to the Bottom of the Vessel. Aqua-fortis seems to render the Colour of this Tincture more deep than it was before." According to *Boecler*, in Distillation it affords a large Quantity of Oil, which, like that of Cinnamon, partly floats, and partly subsides, in the Water with which it is yielded. As this Bark is an Aromatic, we may reasonably conclude, that it is possessed of aromatic Qualities, and consequently that it is stimulating, corroborating, inciding, aperient, and antiacid. It is highly extol'd as a Specific in the Scurvy; and, in *England*, it is sometimes prescrib'd under the Name of *Cortex antiscorbuticus*, or the antiscorbutic Bark. "In *England*," says *Ettmuller*, "it is frequently and successfully exhibited with Crabs-eyes, in scorbutic and hypochondriac Disorders." The Powder of it is given from one Scruple to half a Dram; and, according to others, a whole Dram. When infused in some proper Liquor, two Ounces of the Infusion may be exhibited for a Dose. According to *Valentini*, the Powder of it may be exhibited from ten to fifteen Grains; but, in Infusions or Decoctions, a Dram or two of it may be us'd. The same Author informs us, "That this Bark is possessed of a heating and discutient Quality, whereby it corroborates the Stomach, attenuates thick and scorbutic Blood, and consequently preserves its Circulation: Hence 'tis highly beneficial in Disorders arising from too copious an Use of Sea Salt, the Scurvy, and others of a like Nature. For this very Reason it is, by *Willis*, highly extol'd in a Palsy, and Impotency of the Joints; for strengthening and corroborating which it is calculated, in consequence of its volatile Acrimony, and its oleous penetrating Parts. From this Bark is distil'd a Water, on which floats an Oil, which, when triturated with Sugar, makes an excellent *Elæosaccharum* for the above-mentioned Disorders. Externally it is used in Clysters intended for Apoplexies, Lethargies, and other Disorders of a like Nature. Some, who smoke Tobacco, add a little of it in a Pipe, by which means it diffuses a fragrant Odour, resembling that of Cloves. *Apinus* makes it a Succedaneum to the *Peruvian* Bark, and by its means cur'd not only erratic, but also petechial Fevers." According to the celebrated *Junker*, in his *Conspectus Therapiæ Generalis*, this Bark is resolvent, discutient, and subastringent; for which Reason it is successfully prescrib'd in Disorders of the Stomach, Crudities, Nauseas, Diarrhœas, excessive Vomitings, Colics; as also in the Declension and End of intermittent Fevers, with a View to corroborate the Stomach. It is also said to be highly beneficial to scorbutic Patients, and such as labour under Obstructions of the Viscera, Cachexies, and Irregularities of the Menstrues; but it neither cures quartan nor petechial Fevers, nor affords any considerable Relief to paralytic Patients.

**CORTICALIS SUBSTANTIA.** The cortical Substance of the Brain and *Cerebellum*. See *CEREBRUM*.

**CORTUSA.** This Plant is so call'd from *Cortusus*, a famous Botanist, who first brought it into Use.

The Characters are,

It hath a perennial Root: The Leaves are roundish, rough, and crenated on the Edges, like those of Ground-ivy: The Cup of the Flower is small, and divided into five Parts: The Flowers are shaped like a Funnel, are cut at the Top into many Segments, and are disposed in an Umbel: The Fruit is roundish, terminating into a Point, and is closely fixed in the Cup, in which are contained many small angular Seeds.

1. *Cortusa*. *J. B.* 3. 499. *Boerb. Ind. A.* 206. *Cortusa*, *Sanicula montana*, *Offic. Mont.* 41. *Cortusa Sanicula Alpina quibusdam*, *Chmb.* 490. *Sanicula Alpina sive Cortusa Matthioli*, *Park. Theat.* 533. *Parad.* 240. *Raii Hist.* 2. 1084. *Sanicula*

*Alpina Clusii sive Cortusa Matthioli*, *Ger.* 645. *Emac.* 788. *Sanicula montana latifolia sinuata*, *C. B. Pin.* 243. *Hist. Oxon.* 2. 558. *Auricula Urſi laciniata seu Cortusa Matthioli flore rubro*, *Tourn. Inst.* 121. BEARS-EAR SANICLE.

It grows in mountainous Places, and flowers in the Spring. The Leaves promote Expectoration. Dale from *Monti*.

**CORU Canarica**, *Arbuto vel Malo Aurea similis*. *J. B. Coru Foliis Mali Aurea, flore luteo Acoſta.* *C. B. Coru.* *Park. Lusitanis Herba Malabarica.*

It is a dwarf Tree, like the Quince-tree, with Leaves very like it, and a yellow Flower, with little or no Smell; but *Garcias* makes it have Leaves like those of the Peach-tree, and a white Flower, smelling much like the *Periclymenum*. The Bark of the Root is of a Watry-green, light and thin; and, if broken or wounded, distils a copious milky Juice, more ropy and viscid than what flows from the *Macer*; insipid, if not a little bitterish, cold, and drying, but more drying than cold.

The Inhabitants of *Malabar*, both Pagans and Christians, make very much Use of the Liquor of the green Bark, tho' it be very ungrateful to the Taste, on account of its surprising Effects in all manner of Fluxes, as in the Lientery, Diarrhœa, and Dysentery, from whatever Cause they proceed. The Dose is seven Ounces in the Morning, and as many in the Evening, if Necessity require it; but because the Juice is bitter and unfavoury, they wash their Mouths with Whey after taking it.

The *Portuguese* distil the Bark of the Root, and prepare it in the following Manner:

Take of the Bark pulveriz'd, eight Ounces; of Ammi, Apium, Coriander dry'd, black Cumin somewhat roasted and pulveriz'd, each three Ounces; of the Rinds of *Chebulæ Myrobalans*, seven Ounces; of fresh Butter, made of Cows Milk, two Ounces; four Milk, a sufficient Quantity to dilute the Powders: Distil them in a proper Vessel.

The common Dose, for such as labour under a Flux of the Belly, is four or five Ounces of the distil'd Liquor, with two Ounces of Water of *Indian Filberd*, commonly call'd *Areca*, or Water of the Pedicles of Roses, to be taken once a Day, or twice, if it be necessary. Sometimes, upon a pressing Occasion, they mix with it Troches of Amber, or *Terra Lemnia*. Immediately after taking it, the Custom is to exhibit Rice with Oxygala, or sour Milk, and, toward Night, they administer a Clyster prepared of the said distil'd Liquor.

Tho' *Garcias* had always good Success in the Use of this Water, yet he confesses, that the *Herba Malabarica*, prepar'd by the *Malavarians* themselves, was a more present Remedy. This is made of the same Ingredients as the Water before describ'd, very finely pulveriz'd, and macerated in Whey, or a strong Decoction of Rice. *Acoſta* prefers the green Bark of the *Macer*, tho' much more ungrateful, and difficult to be taken, far before this Liquor. The Medicine before describ'd is also effectual in Weakness of the Stomach, and, taken with Water of Mint, and Powder of *Mallich*, restrains Vomiting. *Raii Hist. Plant.*

**CORVINUS LAPIS.** A Stone said to be found in *India*, called by the Inhabitants *Cocaote*. It is remarkable for making a Noise like Thunder when heated.

**CORUSCUS.** The *Auricula Muris*. *Rulandus*.

**CORVUS**, *Offic. Schrod.* 5. 317. *Aldrov. Ornith.* 1. 694. *Bellon. des Oyse.* 280. *Gesn. de Avib.* 294. *Jonſ. de Avib.* 23. *Charlt. Exer.* 75. *Mer. Pin.* 171. *Schw.* 244. *Will. Ornith.* 82. *Raii Ornith.* 121. *Ejusd. Synop. A.* 39. THE RAVEN.

This is a Bird too well known to require a Description. Young Ravens, calcin'd to Ashes, are recommended against the Epilepsy, Gout, and that Species of Leprosy call'd *Alphus*. The Brain is also taken notice of among the Remedies for an Epilepsy. The Fat and Blood are said to render the Hair black. The Dung, suspended about the Necks of Children, is reported to ease their Coughs, and procure them an easy Dentition. Dale from *Schroder*.

**CORYCUS**, *κρυκός*. A sort of Ball among the Antients, probably made of Leather, and stuffed with the Acini or Grains of the Fig, or Bran, or Meal, for weak Persons, but with Sand for those who were strong and robust, as *Oribasius* informs us from *Antillus*. The Size of this Ball is not determin'd, but probably it was pretty large: It was, however, more or less so, according to the Age and Strength of the Person whom it was design'd for. This was suspended from the Ceiling, in such a manner as to reach as far as the Navel of the Person who was to use it, who took it in both Hands, and, pushing it from him, receded as it return'd. Then throwing it from him, in its Return he either caught it in his Hands, or suffered it to meet his Body. This Exercise was call'd *Corycomachia*, *κρυκομαχία*, and was recommended for extenuating too gross Bodies.

**CORYDALUS**, *κρυδαλός*. The Lark. See *ALAUDA*.

**CORYLUS**. See *AVELLANA*.

**CORYMBIA**, **CORYMBAS**, or **CORYMBE**. The Ivy-tree. *Blancard*.

**CORYM-**



**CORYMBUS**, κόρυμβος. See the Explication of botanical Terms under the Article BOTANY.

Corymbiferous Plants are such as have a compound discous Flower, but their Seeds have no Down adhering to them: The Name is taken from the Manner of bearing their Flowers in Clusters, and spreading round in the Form of an Umbrella, as Onions, &c. Of this Kind is the Corn-marygold, common Ox-eye, the Daisy, Chamomile, Mugwort, Feverfew, &c.

Mr. Ray distinguishes them into such as have a radiate Flower, as the Sun-flower, the Marygold, &c. and such as have a naked Flower, as the Lavender, Cotton, Agrimony, and Tansey; and also those that are akin to them, as Scabious, the Teasel, Carduus, and others. *Miller's Diet. Vol. 1.*

**CORYPHE**, κορυφή. The Vertex, or Top of the Head.

**CORYZA**, κόρυζα. *Celsus* translates this by *Gravedo*, and *Caelius Aurelianus* by *Catarrhus ad Nares*. It imports such a Distillation of Humours from the Nose as happens in a Cold. See CATARRHUS.

**COS**, Offic. Worm. 41. Chart. Foss. 17. Aldrov. Mus. Metall. 718. *Cotes*, Boet. 52. *Cotes*, Kentm. 35. *Cotes*, *Novacula*, Mer. Pin. 211. *Lapis Naxius*, Matth. 1390. THE WHETSTONE.

*Dioscorides* informs us, that the Grit which is worn off the Whetstone, by sharpening Iron, causes Hair to grow upon the Parts affected with an *Alopecia*; that it restrains the Growth of the Breasts in Virgins; and that, drank with Vinegar, it consumes the Spleen, and is good for an Epilepsy.

There are three different Sorts of Whetstones, the Hone, the Gritstone, and the black Whetstone. It is not easy to determine which is meant by *Dioscorides*.

**COSCINOS**, κόσκινος. A Sieve, or Sierce.

**COSCULIA**, κοσκύλια. The Grains of *Chermes*.

**COSMET**, Antimony. *Johnson*.

**COSMETICA ARS**. That Part of Medicine, which is employ'd in preserving or improving the natural Beauty. See COMMOTICA.

**COSMETORGES**. A Word coin'd by *Dolæus*, to express the sensitive Soul. *Gastellus*.

**COSMIANA ANTIDOTUS**. The Name of an Antidote in *Marcellus Empiricus*, Cap. 29.

**COSMOS**, κόσμος. This, in *Hippocrates*, is the Order and Series of critical Days.

**COSSI**. Hard Tubercles in the Face. The same as VARI. See VARUS.

**COSSUM**. A malignant Ulcer of the Nose, mention'd by *Paracelsus*.

**COSSUS**. A small Worm, which eats into Wood. See TEREDO.

**COSTÆ**. In Botany, the Nerves of Leaves. These are long tough Strings; which run either across or lengthways in the Leaves of Plants.

**COSTÆ**, in Anatomy, signifies the Ribs. These are so united with the *Sternum*, in the Formation of the Thorax, that it will be necessary to describe them under the same Article, in order to avoid Confusion. See, therefore, THORAX.

**COSTUS**, Offic. Comm. Flor. Mal. 90. *Costus Arabicus Dioscoridis*, C. B. Pin. 36, 37. *Iridem redolens ejusdem, amarus Officinarum, seu Helenium, & Comagenium Dioscoridis ejusdem, dulcis Officinarum, Centaurio magno cognatus ejusdem*, Raii Hist. 2. 1347, 1348. *Costus Helenii facie Officinarum*, J. B. 2. 749. Chab. 246. *Costus dulcis Officinarum*, Ejusd. *Indicus odoratus*, Ger. Emac. 1620. *Indicus Clusii*, Park. Theat. 1582. *Costus Indicus Violæ Martis odore*, Herm. Mus. Zeyl. 58. *Tsjana Gna*, Hort. Mal. 11. 15. Tab. 8. SWEET AND BITTER COSTUS.

Tho' these were antiently esteem'd to be two different Roots, yet they are now generally believed to be both of them the Roots of the same Plant, differing only in Age; the freshest being only the *Costus dulcis*, and the oldest and stalest the bitter; and, indeed, so long ago as *Garcias ab Horto* and *Clusius*, they began to be of this Opinion. This is a pretty thick Root, brown on the Outside, and of a yellow White within, appearing a little spongy in the Middle. 'Tis of a somewhat hot bitterish Taste, and of a Smell pretty much resembling the Orris-root. The *Costus* is describ'd in the 11th Volume, and 15th Table, of the *Hortus Malabaricus*, by the Name of *Tsjana Gna*.

It is accounted to be hot and dry, comforting the Head and Stomach, and helping vertiginous Disorders. It is likewise a good Deobstruent, opening Obstructions of the Womb, and procuring the Catamenia. It is one of the Ingredients in the *Theriac*.

It bears a Part in naming the *Electuarium Caryocostinum*. *Miller's Bot. Off.*

It is also esteem'd as a good Hepatic; and is said to be of Service in Obstructions of the urinary Organs, Colic, Dropsy, and Palsy.

That *Costus* is best which is recent, dense, odorous, bitterish, and not carious.

*Geoffroy* says, we are still ignorant of the *Costus* of the Antients, of which the *Greeks* had three Kinds. *Pliny* distinguishes two Kinds, the white and black; and the *Arabians* had likewise two Kinds, one sweet, the other bitter. The Dose of our *Costus* is from twelve Grains to half a Dram; and, in Infusion, from two Drams to half an Ounce. It was antiently used as a Perfume.

It was likewise employ'd in Sacrifices.

**COSTUS HORTORUM**. See BALSAMITA MAS.

**COSTUS NIGRA**. See CINARA.

**COTARONIUM**. A Word coin'd by *Paracelsus*. It implies a Liquor, into which all Bodies, and even their Elements, may be dissolved.

**COTHON**, κώθων. A kind of large earthen Cup, used to drink out of; or an earthen Vessel, wherein Flowers, Leaves, and Roots, were kept, being press'd down in it. In *Galen*, it imports an earthen Vessel for burning Cadmia.

**COTINUS**, κότινος, among the Antients, imported the *Oleaster*, or wild Olive-tree. But

**COTINUS**, among the modern Botanists, implies a Shrub of another Kind.

The Characters are,

The Leaves are round, and sustain'd by long Pedicles. The Flower-cup is small and quinquefid; the Floscules are rosaceous and pentapetalous, disposed in capillary Branches; the Ovary becomes an orbicular Fruit, which contains a triangular Seed, under a hard indivisible Shell.

There is but one Species of the *Cotinus*, which is the *Cotinus*; coriaria. *Jonst. Dendr.* 293. *Elem. Bot.* 483. *Tourn. Inst.* 610. *Boerb. Ind. A.* 2. 228. **COTINUS**, Offic. Rupp. 110. *Jen.* 80. *Cotinus Matthioli*, C. B. Pin. 415. *Coccigria*, *Cotinus coriaria nonnullis dicta*, Chab. 37. *Coccigria, sive Cotinus putata*, J. B. 1. 494. *Raii Hist.* 2. 1696. *Coggygia Theophrasti vel Cotinus coriaria Plinii*, Ger. 1293. *Emac.* 1476. *Cotinus Coriaria*, Park. Theat. 1451. VERNICE OR RED SUMACH.

This Shrub flowers in May, and produces ripe Fruit in July and August. The Wood is used, in the Southern Parts of France, to dye Woollen Cloth yellow. The Leaves are used by the Tanners for preparing their Leather.

The whole Plant is thought to be extremely drying and astringent. Of a Decoction of the Leaves, Gargarisms are prepared, which are good for Ulcers of the Mouth and Tongue; and are used against Relaxations of the Uvula, and Glands in the Fauces. The Fruit is particularly serviceable in Ulcers of the Fauces and Pudenda; and restrains Diarrhoeas, and a too copious menstrual Discharge.

The Leaves, dry'd and powder'd, and then sprinkled on the Belly, after anointing it with Vinegar of Roses, stop any Flux of the Belly, according to *Matthioli*.

**COTIS**, κορίς. The posterior Part of the Head. Some take it for the Hollow of the Neck, near its Articulation with the Head. *Hippocrates* uses this Word in his Treatise de Morbis, L. 2.

**COTONASTER**. A Name for the *Cratægus*; folio oblongo; serrato, utrinque virente.

**COTONEA**. See CYDONIA.

**COTONEASTER**. A Name for the *Mespilus*; folio subrotundo; fructu rubro.

**COTONIUM**. See BOMBAX.

**COTYMPHUS**, κότυφος, or κύτυφος. The Name of a Fish mention'd by *Oribasius*, in his medicinal Collections, L. 2. C. 58. It is the *Alerula*, or Cook-fish. See MERULA.

**COTULA**.

The Characters are,

The Leaves are small, like those of Chamomile; the Flower is crown'd, or naked; the Seeds are flat, in the Shape of a Heart, and winged. The Flower-cup is generally squamous.

*Boerhaave* mentions six Species of this Plant, which are,

1. *Cotula*; flore luteo, radiato. See BUPHTHALMUM.  
2. *Cotula*; flore pallido, radiato: *Chrysanthemum, folio Cotulae, flore albo*. *Triumfett. Chrysanthemum, fruticosius, subcandium*. C. B. P. 135. a.

3. *Cotula*; floris radiis sulphureis, disco luteo. a.  
4. *Cotula*; flore albo, pleno. a.

5. *Cotula*; flore luteo, nudo. T. 495. *Chrysanthemum, Valentinum*. Clus. H. 332. *Buphtalmo tenuifolio simile, Chrysanthemum Valentinum Clusii*. J. B. 3. 125.

6. *Cotula*; Cretica; minima; folio Chamæmeli; capitulo inflexo. T. Cor. 37. a. *Boerhaave's Index alter Plant. Vol. 2.*

**COTURNIX**, Offic. Schrod. 5. 317. *Bellon.* des Oyse. 264. Aldrov. Ornith. 2. 150. Will. Ornith. 121. *Raii Ornith.* 169. *Ejusd. Synop. A.* 58. *Gesn. de Avib.* 310. *Mer. Pin.* 173. *Schw. A.* 247. *Charlt. Exer.* 184. *Jonst. de Avib.* 47. THE QUAIL.

You are to chuse those which are young, tender, and well fed. They are very nourishing, create an Appetite, and produce good Juice.

Several Authors look upon Quails to be very bad Food, tho' they are not so much so, as they would have them to be. Indeed, they are somewhat hard of Digestion, especially when old.

They contain much Oil, and volatile Salt.



They agree at all times with any Age and Constitution, provided they are moderately used.

## R E M A R K S.

The Quail is a small Bird, somewhat bigger than a Thrush, finely feather'd, and has a pleasant Note. It usually feeds upon Millet, Corn, and other Grains. It is such tender and delicious Food, that it is served to the best Tables.

Most Authors do not agree about the Effects produced by the Quail. *Averrhoes* says it has good Juices; and that it is good for Persons recovering from Sickness, and such as enjoy perfect Health; which we willingly agree to, because, in the first Place, we have not experienced any ill Effects produced by the Quail: Secondly, because we find its Flesh to consist of a Substance, which is a little compact in the Parts thereof; and that it contains a convenient Proportion of oily and balsamic Principles, and of volatile Salts. Indeed, it is sometimes not so easy of Digestion, and this proceeds from its Over-fatness, which makes it sit heavy on the Stomach; but when it is used moderately, there is none of this small Inconvenience to be met with from it.

*Galen*, *Pliny*, and *Avicenna*, on the contrary, assure us, that the Quail is very dangerous Food; and *Galen* says, he had seen several Persons in *Phocis*, *Boeotia*, and *Doris*, who fell into Convulsions and Epilepsies, that had eaten thereof; and this, as he imagines, was produced from the Quails of this Country feeding upon Hellebore; tho', on the contrary, this Plant seems to me to be more likely to cure, than to cause the Epilepsy; for this, working by Stool and Vomit, may expel the sharp and pungent Humours which cause it: But tho' Hellebore, of itself, were proper for the producing of Epilepsies, and that Quails very frequently feed upon it, it would not from thence follow, that Quails cause Epilepsies; since the Hellebore, by assimilating itself with the solid Parts of the Quails, must have lost a certain Disposition of its insensible Parts, wherein alone this pretended Malignity might consist.

Those who are of *Galen's* Opinion, in respect to a Quail, further say, for the maintaining of it, that Quails, being very liable to epileptical Motions, may impart the same to those that eat them; but it would follow from hence, that Goats, Sheep, Capons, Turtles, and several other Animals, commonly eat by us, and that are often subject to Epilepsies, must communicate the same to us, which we have not yet experienced. Some of the Antients, following the false Reasoning of *Galen*, with respect to the Effects of the Quail, will have it eaten with Coriander-seed, Vinegar, and several other Ingredients, which will make it lose its good Taste, and so pretend hereby to divest it of its supposed Malignity; but as we are not yet so well convinced of its being so pernicious, we shall hold ourselves free to season the Quail with what we shall deem most proper to improve its pleasant Taste; and we shall not trouble ourselves about correcting a pretended ill Quality, of which we have no manner of Experience.

The Quail does not rise high above the Earth, and flies heavily; for which Reason *Pliny* calls it rather a terrestrial than aerial Bird; but Nature has made it Amends, by the great Agility of its Feet, whereby it runs extremely swift. It is a wanton and lascivious Bird.

The Fat of the Quail is good to take away Specks on the Eyes; as its Dung, when dried and reduced to Powder, is for the Falling-sickness. *Lemery on Foods*.

As the Aliment of Quails is principally Vegetables and Water, and the habitual Exercise not very great, it does not seem likely, that the Salts should be very much exalted; and yet the Lewdness of this Bird insinuates the contrary.

*Boerhaave* classifies the Quail amongst calefcent Aliments, and says it feeds on Insects.

COTYLA. See CHAMÆMELUM.

COTYLE, *κοτύλη*. This properly signifies any deep Cavity in a Bone, in which any other Bone is articulated; but it is generally used to express the Acetabulum, or Cavity, which receives the Head of the Thigh-bone. It also imports a deep Sinus, surrounded with large Lips.

*Cotyle*, *Cotyla*, *Cotula*, among the Antients, signify'd not only a Drinking-cup, of a wide and deep Capacity, but any thing which had a Cavity; for Instance, the Hollow of the Hand, as we learn from *Athenæus*, *Lib. 11. Cap. 8*. But it is also a Measure of Capacity among the *Greeks* for Things liquid as well as dry, and is the same with the Hemina of the *Romans*, containing half a Sextary, or four Acetabula: Hence it appears, that it contains ten Ounces of Wine, and nine of Oil. See *Galen, de Ponderibus & Mensuris*, where he also determines its Capacity of Honey, which is thirteen Ounces and a half. *Philander*, on *Vitruvius*, makes the *Cotyla* consist of ten *Unciæ mensurales*. It will help us, for the better understanding of Authors, to read what *Pitiscus* has written on this Subject in his *Lexicon*: "The *Cotyla*, says he, which is also call'd *Triblion*, is half a Sextary, and the twelfth Part of a Chœus. It

" contains two Quarteries and six Cyathi: Its Capacity, full  
" of Oil, weighs seven Ounces and a half, or sixty Drams;  
" and it holds, of Wine or Water, eight Ounces two Drams  
" two Scruples. The *Attic Cotyle* was nine *Italic Ounces*,  
" which, as they are mark'd by the Sections of the Horn,  
" weigh seven Ounces and a half; so that the *Unciæ mensura-*  
" *les* differ from the *ponderales*; and hence it is, that the  
" medicinal *Unciæ*, and *Libræ mensurales*, are the same as the  
" *Attic* and *Roman*. The *Cotyla Georgica* is larger than the  
" *Libralis*, as containing thirteen *Unciæ mensurales* and a half,  
" that is, a *Roman Pound*, besides an Ounce and a half. The  
" *Cotyla hippiatrica libralis* is twelve *Roman Ounces*. That  
" of *Paris* is, indeed, a Pound; but more than the *Roman*  
" Pound, in the same Proportion as the *Paris Foot* is larger  
" than the *Roman Foot*; that is, by nine Drams, or an Ounce  
" and a Dram, which we may call the Depth of an Inch and  
" a half, if we compare lineal with solid Measures." *Rieger*.

It is necessary, for understanding the above Quotation, to observe, that there was amongst the *Romans* a *Libra mensuralis*, which the *Greeks* call'd *λίτρα μετρική*, and distinguish'd from the *λίτρα σταθμική*, or the *Libra ponderalis*. This consisted of twelve Ounces, and was divided likewise as the *As*. It was made commonly of Horn, and divided by twelve Lines marking the Ounces; from whence it was call'd by *Galen* *κίεζς μετρεσίον*, *Cornu mensurale*. According to *Galen*, *Lib. 6. de Compos. Medicament.* this *Libra mensuralis* weigh'd ten Ounces of Oil, and, of Wine, eleven Ounces two Scruples one Obolus and one Siliqua, according to the ponderal *Libra*; that is, in the Proportion of Nine to Ten, which the Antients all along supposed to be that of the specific Gravities of Oil and Wine. According to the Weight of Wine assign'd by *Galen*, the *Libra mensuralis* contain'd 19.085 solid Inches, somewhat less than three Quarters of our Pint, Wine-measure.

COTYLEDON. Certain glandular Bodies, adhering to the Chorion of some Animals, are call'd by the Name of *Cotyledons*; but no such Substances are observable in the Human Chorion.

COTYLEDON, in Botany, is that Part wherein the nutritious Juices of the new Plant are prepared. In some Plants there is but one Cotyledon, but in most there are two, which become the seminal Leaves: Hence the Distinction betwixt monocotyledonous and dicotyledonous Plants. *Rieger*.

COTYLEDON is also the Name of a Plant.

The Characters are,

In Root, Leaves, Stalk, and the whole Appearance, it resembles the *Sedum*, Houseleek. The Flower-cup is multifid. The Flower is monopetalous, quinquefid, and tubulated. The Fruit is like that of the *Sedum*.

*Boerhaave* takes notice of ten Species of this Plant.

1. *Cotyledon*; major. *C. B. Pin.* 285. *Tourn. Inst.* 90. *Elem. Bot.* 76. *Boerb. Ind. A.* 287. *Umbilicus Veneris*, *Offic. Ger.* 423. *Emac.* 528. *Mer. Pin.* 126. *Merc. Bot.* 1. 77. *Phyt. Brit.* 131. *Umbilicus Veneris vulgaris*, *Park. Theat.* 740. *Cotyledon vera, radice tuberosa*, *J. B.* 3. 683. *Raii Hist.* 2. 1878. *Synop.* 3. 271. *Cotyledon, Umbilicus Veneris*, *Chab.* 537. *Cotyledon Dioscoridis, Umbilicus Veneris vulgaris*, *Rupp. Flor. Jen.* 31. *Sedum luteum murale Spicatum, folio umbilicato rotundo*, *Hist. Oxon.* 3. 470. NAVELWORT.

This Plant has a thick knotted Root, with many Fibres at the Bottom, from which spring several fat succulent Leaves; the lowermost of which have their Foot-stalks set on upon the Side of the Leaf, which is roundish, and crenated about the Edges; but the upper Leaves have the Foot-stalk inserted into the Middle. They are round, and somewhat hollow. The Flowers grow on the Tops of the Branches, in long Spikes, of a whitish-green Colour, hollow, and of an oblong cylindrical Shape, each of which is succeeded by two little horn'd Vessels, in which are contain'd many small Seeds. It grows upon old Stone-walls and Buildings in divers Parts of *England*, and flowers in *May*. The Leaves only are used.

*Navelwort* is gently cooling and moistening, refrigerating and astringent, useful in hot Distempers of the Liver: It provokes Urine, and takes off the Heat and Sharpness thereof. The Juice, outwardly applied, helps the Shingles, *St. Antony's Fire*, the Pain and Inflammation of the Piles. It is likewise useful against Kibes and Chilblains. It is an Ingredient in the *Unguentum Populeon*; tho' the Herb-gatherers too frequently impose the *Nymphæa minima*, or Frog-bit, or, which is worse, the *Cotyledon palustris*, or Marsh-pennywort, for this Herb, on their unwary Customers.

*Cotyledon*; *Africana*; frutescens; foliis orbiculatis, limbo purpureo cinctis. *T.* 90. *Sedum, Africanum, frutescens, incanum, foliis orbiculatis*. *H. L.* 349. *M. H.* 3. 474. *Sedum, majus, arborescens, Africanum, alterum, foliis rotundioribus, glaucis, limbo purpureo cinctis*. *Breyn. Prodr.* 1. 47. *Sedum, majus, arborescens, Africanum, foliis rotundioribus, glaucis, flore rubente*. *Breyn. Prodr.* 2. 89. *H.* SHRUBBY AFRICAN NAVELWORT, WITH ROUND LEAVES EDG'D WITH A PURPLE RIM.



3. Cotyledon; Afra; arborefcens; major; foliis glaucis, oblongioribus; flore luteo. *Sedum, majus, arborefcens, Africanum, foliis oblongioribus, flore luteo.* Breyn. Prodr. 2. 88. *Sedum, arborefcens, Promontorii Bonæ Spei.* Stapel. 335. Breyn. Prodr. 1. 47. *Sedum, maximum, arborefcens, latifolium, flore flavo.* Dn. ten. Rhyne. Breyn. Cent. 1. 179. H. GREATER TREE-LIKE AFRICAN NAVELWORT, WITH OBLONG SEA-GREEN LEAVES, AND A YELLOW FLOWER.

4. Cotyledon; major; arborefcens; Afra; foliis orbiculatis, glaucis, limbo purpureo, & maculis viridibus, ornatis. H. GREATER TREE-LIKE AFRICAN NAVELWORT, WITH ROUNDER SEA-GREEN LEAVES, HAVING PURPLE EDGES, AND SPOTTED WITH GREEN.

5. Cotyledon; major; arborefcens; Afra; foliis minoribus, crassissimis, viridioribus, minutissimè punctatis. *Sedum, Africanum, folio rotundo, minori.* Ind. 121. H. GREATER AFRICAN TREE-LIKE NAVELWORT, WITH SMALL THICK LEAVES.

6. Cotyledon; major; arborefcens; Afra; foliis minoribus, oblongis, atro-viridibus. H. GREATER AFRICAN TREE-LIKE NAVELWORT, WITH SMALL OBLONG DARK-GREEN LEAVES.

7. Cotyledon; Africana; frutescens; folio longo & angusto; flore flavescente. *Commel. Rar.* 23. H. R. D. SHRUBBY AFRICAN NAVELWORT, WITH A LONG NARROW LEAF, AND A YELLOWISH FLOWER.

8. Cotyledon; Africana; frutescens; flore umbellato, coccineo. *Commel. Rar.* 24. H. R. D. SHRUBBY AFRICAN NAVELWORT, WITH SCARLET FLOWERS GROWING IN AN UMBEL.

9. Cotyledon; Afra; arborea; crasso caudice; folio auriculæ Urli angustiore.

10. Cotyledon; Afra; folio crasso, lato, laciniato, flosculo aurco. *Telephium, maximum, Africanum, flore aurantio.* Ex Cod. Bent. 1. Plukn. Phyt. 228. 3. H. R. D. AFRICAN NAVELWORT, WITH A BROAD THICK DIVIDED LEAF, AND SMALL YELLOW FLOWERS. *Boerb. Ind. alt. Plant. Vol. 1.*

Besides the foregoing Species of the Cotyledon, Dale mentions the following:

COTYLEDON. Offic. *Cotyledon radice tuberosa longa repente.* Mor. Hort. Bles. 257. Chomel. 807. Tourn. Inst. 90. Elem. Bot. 76. Raii Hist. 2. 1878. *Cotyledon flore luteo radice repente.* Dodart. Mem. 73. *Cotyledon flore luteo maxima.* Hort. Lugd. Bat. 191. *Sedum luteum umbilicatum spicatum radice repente majus.* Hist. Oxon. 3. 471. CREEPING NAVELWORT.

The Leaves are used in the same Intentions as those of the first Species mention'd above.

COVALAM. The Name of a Plant which grows in the East Indies, otherwise called, *Cucurbitifera trifolia Indica fructus pulpâ Cydonii æmula. Cydonia exotica. C. B. An Malum Cydonium Indicum.* Bontius? *Beli seu Serifole Bengalenfium, Cydonia eorundem Garcie.* J. B.

This is a tall Tree, which grows in Malabar, and the Island of Ceylon; the Fruit of which resembles a round Apple in Shape; it is cover'd with a greenish thin Rind, under which lies another, which is hard and woody, inclosing a viscid, yellowish, moist Substance, of a sweetish acid Taste, in which are plac'd flat, oblong, white Seeds, turgid with a gummy pellucid Juice.

This Fruit, whilst tender, is preserv'd in Sugar or Vinegar; when ripe, they are eaten by the Inhabitants of the Country, and esteem'd delicious; whilst unripe, they stop a Diarrhœa, or Dysentery. A Decoction is prepared of the Bark, and small Roots, with common Water, which cures hypochondriac Melancholy, Palpitations of the Heart, and Faintings. An Electuary, made of the Bark in Powder with Honey, promotes the Digestion of the Aliment, and takes away Head-achs, and Vertigos. A Decoction of the Leaves cures an Asthma. From the Flowers a Water is distill'd, possess'd of cardiac and alexipharmic Virtues.

The Physicians of the Country, where this Tree grows, use the immature Fruit, preserv'd in Honey or Vinegar, to stop a Diarrhœa; and employ it for the Cure of a Dysentery with great Success, prepared in any Manner. Raii Hist. Plant.

COUHAGE. Offic. *Phaseolus Zurratensis, siliquâ hirsutâ, Couhage dicta.* Raii Hist. 1. 287. Flor. Mal. 212. Rivin. Irr. Tetr. *Phaseolus siliquâ hirsutâ.* Park. Theat. 1056. *Phaseolus pruritus excitans hirsutæ siliquarum.* Ger. Emac. 1215. *Phaseolus Zurratensis siliquâ hirsutâ pungente.* Hist. Oxon. 2. 69. Herm. Hort. Lugd. Bat. 492. *Phaseolus utriusque Indiæ lobis villosis, pungentibus, minor.* Par. Bat. Prod. 365. Cat. Jam. 69. Hist. Jam. 1. 37. *Phaseolus Brasiliensis siliquis durante lanugine obsitus, Ricini fructu.* Flor. Par. 140. *Phaseolus Suratensis villosus siliquâ hirsutâ, pungente.* Hort. Bos. 27. Nai Corona. Hort. Mal. 8. 61. COUHAGE, OR STINKING BEANS.

This is a Sort of Kidney-bean imported from the East Indies, where they are used as a Cure for the Dropsy.

Infuse twelve Pods of this Plant in two Pints of Beer, and exhibit a Quarter of a Pint of this Infusion every Morning to one labouring under a Dropsy, and you will experience it to be a most certain Remedy. This Receipt was communicated by Sir Samuel Husbands, who lived some Years in Barbadoes, and had often tried it on his Negro Slaves. Raii Hist. Plant.

This is call'd *Siliqua hirsuta*, and, by a Corruption of the Word, *Cowitch*. The Down, growing on the Outside of the Pod, is so pointed, as, like a Nettle, to sting the Flesh, but not with so painful a Sensation; this causing only to itch; which continues so long, and at last will grow so troublesome, as to excite much Pain in rubbing to allay it; so that it frequently occasions a Flux of Humours to the Parts.

COUM is a Name for the Colchicum; Chionense; floribus Fritillariæ instar tessellatis; foliis undulatis. See COLCHICUM.

COURAP. The Indian Name for a Distemper, which, as Bontius informs us, is very common in Java, and other Parts of the East Indies. It is a Sort of Herpes, or Itch, which generally breaks out on the Arm-pits, Breast, Groins, and Face, with such an intolerable Itching, that the Persons affected cannot forbear scratching themselves perpetually, both in the Day, and during the Night: But they pay very dear for the Diversion which this gives them; for an insufferable Pain succeeds in those Parts which are rendered bare, and denuded of the Cuticula, by the Nails; these discharging an acrid Humour, which vellicates the Parts, and causes the Linen to adhere so fast to the raw Parts, as that it cannot be separated from them without tearing the Crust form'd thereon. Courap is a general Name for any Sort of Itch; but the Inhabitants call this Distemper thus, by way of Eminence. It is so extremely contagious, that very few escape it. Though it is an unseemly Disorder, causing a Roughness of the Skin, with Scales or Furfures, yet the Inhabitants imagine, that it is attended with one Advantage; which is, that, whilst a Person is affected with this, he is sure to be troubled with no other dangerous Distemper; and look upon the Disappearing of this, as a Prognostic of some worse Disorder. They are, therefore, very easy under it for many Years together, without being very solicitous about curing it. It is remarkable, that the Vulgar in Scotland are possess'd of the same Opinion with respect to the Itch, and even carry it so far, as to affirm, that the Catching this Distemper proves a Cure for any other previous to it, considering it in the same Light as others do the Gout, perhaps with just the same Foundation.

The Cure, according to Bontius, is to be begun by repeated Purges of the following Powder:

Take of clean Sena-leaves, fourteen Ounces; of the best Rhubarb, and white Turbith, each eight Ounces; of white Tartar, and the best Scammony, each four Ounces: Mix together.

The Dose is half a Dram.

As for Topics, Bontius recommends the following, which, he informs us, was communicated to him by Justus Heurnius:

Take of the Rust of Iron, an Ounce; of Sulphur, half a Dram: Let these be finely powder'd in a Mortar, adding as much of the Juice of the Basilicon, which grows in the Indies, as is sufficient to make the Powder into Pastils, which are to be dissolv'd in Vinegar, and applied to the Part affected at Night, washing it off the next Morning.

If this is not sufficient to perform a Cure,

Take of Opium, half a Scruple; of Lime prepared of Shells calcin'd, two Scruples: Let these be rub'd together in a Mortar, with the Juice of Love-apples. When the Crust is abraded, and the Ichor well absterg'd from the Part affected, let it be anointed with this Composition.

Bontius adds, that Oil of Benzoin, with a little Nitre, Sal Prunellæ, or a very small Quantity of Sublimate, makes a good Topic in these Cases; and that the Juice of Lemons may be commodiously added to these Applications. He farther informs us, that he cured himself, when affected by this Disorder in the Arm-pits, and upon the Breast, by once purging, and then anointing the Part affected with prepar'd Tutty, or Ceruss alone. The Diet should be moderate, and of Aliments which afford a good Juice. Bontius, de Medicina Indorum.

COURBARIL. This is the American Name, by which the Indians call the Tree which produces the Gum Anime.

The Characters are,

It hath a papilionaceous Flower, from whose Calyx arises the Pointal, which afterwards becomes an uncapfular hard Pod, including roundish hard Seeds, which are surrounded with a fungous stringy Substance.

It is thus distinguished by Authors:

*Arbor Brasiliensis siliquosa & gummifera, Gummi Anime simili.* Ejusd. 1760. *Arbor siliquosa ex Virginia, Lobo fusco, Scabro.* C. B. Pin. 404. *Arbor siliquosa, ex qua Gummi Anime elicetur.*



*elicitur. Ejusd. Animifera Arbor Brasiliiana. Herm. Par. Bat. Prod. 312. Anime, Cancamum Græcorum. Mont. Exot. 11. Ind. Med. 10. Acaciæ quodammodo accedens, Arbor Anime Gummi fundens, Americana, foliis magnis acuminatis in pediculo binis, lobo magno, crassissimo, eduli. Breyn. Prod. 2. 8. Ceratia diphyllos Antegona, Ricini majoris fructu, offea siliqua grandi incluso. Pluk. Almag. 96. Phytog. Tab. 82. Jetaiba Arbor. Pison. (Ed. 1648.) 60. (Ed. 1658.) 123. Jonf. Dendr. 313. Jetaiba Brasiliensis. Marcg. 101. Courbaril. Plum. Nov. Gen. 49. Tab. 36. Lobus ex Wingandecauru. J. B. 1. 436. Lobus Peregrinus cartilagineus Phaseolo nigro puniceo annulo cincto. Chab. 138. Locus vulgo. THE LOCUST-TREE. Dale.*

It is a large Tree, growing in many Parts of the *West Indies*, bearing two Leaves at a Joint, which are about the Bigness and Shape of Bay-leaves, but having the middle Rib bending towards one Side of the Leaf, which makes one Half appear bigger than the other. It bears large Lobes or Pods, three or four Inches long, and two Inches over, of a flattish round Shape, very thick and hard, and full of small Asperities, making them feel like Shagreen, of a brownish yellow Colour, containing in the Inside several hard stony Kernels.

**COURONDI.** H. M. P. 4. T. 50. *Arbor Indica fructu rotundo, cortice molli nucleum unicum nudum Glandi similem continente.*

This is a tall evergreen Tree, which grows about *Paracaro*, in the *East Indies*. The Juice express'd from the Leaves, taken in warm Whey, cures a Diarrhoea and Dysentery; as do the Kernels of the Fruit, taken any way. *Raii Hist. Plant.*

**COUROU-MOELLI.** H. M. P. 5. T. 39. p. 77. A Shrub about four or five Foot high, which grows about *Baypin*, and other sandy Places near *Cochin*, in the *East Indies*. The Bark, together with the Root, boil'd in Cows Milk, is esteem'd an Antidote against the Bites of Serpents. Of the Bark bruised, with Oil, a Liniment is prepared, which is said to be good in the Gout. The Fruit, which is a black, shining, succulent, acid Berry, is esteem'd very delicious. *Raii Hist. Plant.*

**COUTON.** The Name of a Tree which grows in *Canada*, like the Walnut-tree, call'd *Arbor Vinifera Couton, Juglandi similis*. J. B.

This Tree is remarkable for affording, from Incisions made in it, a Juice in great Quantities, of a very agreeable Taste, like that of *Orleans Wine*.

**COXÆ OSSA.** The same as *Ossa Innominata*. See *INNOMINATA*.

**COXENDIX.** The Ischium. Some call the *Ossa Innominata* by the Name of *Ossa Coxendicis*. See *INNOMINATA*.

**CRABRO.** Offic. Aldrov. de Insect. 225. Jonf. de Insect. 22. Charlt. Exer. 38. *Crabro vulgaris*. Raii Insect. 250. *Crabro, Tenthredo*. Mer. Pin. 196. Mouff. Insect. 49. **THE HORNET.**

I don't know that the Hornet is used as a Medicine; but their Combs are recommended in a Drench for that Disorder in Horses, which *Vegetius*, L. 2. C. 23. calls *Scrofula*, meaning, I believe, what we call the Strangles.

The Sting of the Hornet is very troublesome, making the Part affected to swell very much, with an excessive Pain. I should apprehend, that anointing it with Oil of Olives would be the most effectual Remedy.

**GRADE, κρεῖδον.** In *Hippocrates* it imports the Branch of a Fig-tree.

**CRÆPALE, κραιπάλη.** According to *Galen*, in his Commentary on the third Aphorism of the fifth Section of *Hippocrates*, it signifies every Disorder of the Head, produced by excessive drinking of Wine.

**CRAMA,** from *κράννοναι*, to mix. Any sort of Mixture.

**CRAMBE,** in general, signifies a Cabbage; but the modern Botanists distinguish it from the *Brassica*. According to *Boerhaave*, the Characters are,

The Seed-vessel is uncapfular, divides into two Parts, and contains a single oblong Seed.

The Species are,

1. *Crambe; maritima; folio Brassicæ. Tourn. Inst. 211. Elem. Bot. 181. Boerb. Ind. A. 2. 1. Raii Synop. 3. 307. Brassica sylvestris. Offic. Brassica Maritima. Raii Hist. 1. 838. Brassica Maritima monosperma. C. B. Pin. 112. Brassica Marina Anglica. Ger. 248. Fumac. 315. Mer. Pin. 16. Brassica Marina monosperma. Park. Theat. 270. Merc. Bot. 1. 24. Phyt. Brit. 16. Brassica monosperma Anglica. J. B. 2. 830. Chab. 270. Brassica major repens, multiflora, alba, monosperma. Hill. Oxon. 2. 209. **SEA-COLEWORT, or CABBAGE.***

This is used as an Aliment, like other Cabbage, when very young; but is esteem'd more hot and dry. *Dale* informs us, that the Leaves heal Wounds, and discuss inflammatory and other Tumors.

2. *Crambe; Orientalis; dentis leonis folio; erucaginis facie. T. G. 14. Boerb. Ind. alt. Pol. 2.*

I don't know, that the second Species has any medicinal Virtues ascribed to it.

**CRAMBEION, κρεμβειον,** according to *Erotian*, is the old

*Sicilian Name* for the *Cicuta*, Hemlock; and *κρεμβειον* is, by *Hesychius*, interpreted the same. But

**CRAMBION, κρεμβειον,** in *Hippocrates*, imports a Decoction of Cabbage.

**CRAMPUS.** The Cramp. *Helmont.*

**CRANEA, κρανία.** The Cornus. Cornelian Cherry-tree.

**CRANGON.** Offic. *Squilla Crangon.* Aldrov. de Exang. 150. 149. Rondel. de Pisc. 1. 547. Gesn. Aquat. 906. Jonf. Exang. 17. *Alia Squilla.* Bellon. de Pis. 359. **THE PRAWN.**

This is a Sea Shell-fish, too well known to require a Description. It is esteem'd an extremely nourishing Food, and therefore proper in Consumptions. *Dale.*

**CRANIUM.** The Skull. See *CAPUT*.

The human Skull has been much celebrated for the medicinal Virtues it is said to exert, in the Cure of Epilepsies, Apoplexies, Dysenteries, Fevers, and arthritic Disorders; and has, on this Account, not only been employ'd as an Ingredient in some Shop-Compositions, but has also been recommended by the Superstitious, as an Amulet against Consumptions, Hæmorrhages, and Incontinence of Urine. But, because the Use of this Remedy was likely very often to disappoint the Patient who try'd it, certain Circumstances, not very easy to be comply'd with, were said to be necessary to its producing the salutary Effects intended, which might serve as an Excuse for the Prescriber, in case of Failure. Thus the Skull was to be that of a young healthful Man, who died of a violent Death; it was, moreover, to have been exposed to the Air for many Years, and never to have been buried; besides, it was to be very clean, and free from Filth. A Female Skull only, as was said, could produce the desired Effects in Women, and that of a Male in Men. And the anterior Part was prefer'd to the posterior. Some attributed the greatest Efficacy to the triangular Bone, which, in some Skulls, is found at the Juncture of the lambdoidal and sigittal Sutures. In order to increase the Esteem, and, consequently, the Price, of Medicines prepared of the human Skull, some Dealers in Medicines endeavoured to possess People with a Notion, that, upon distilling or calcining it, various supernatural Noises were heard, as if some evil Spirit was inclin'd to frighten the Artift from procuring a Medicine of such extraordinary Virtues. Some grave Authors, however, prescribe it: Thus, *Angelus Sala* directs it to be taken uncalcined, in the Form of a very fine Powder, for the Epilepsy. And *Lemery* orders it, with the same View, dry'd and powder'd, from ten Grains to two Scruples; and, upon a Supposition that it is possess'd of some Virtues against an Epilepsy, accounts for them from the volatile Salts it contains: Therefore, says he, it must not be calcined, because, by that means, it is depriv'd of its volatile Salts, the Part wherein its Efficacy resides. *Riverius* orders the Shaving of a Skull, in the Quantity of a Dram, to be taken in Broth, or any other proper Liquor, for the Cure of a Dysentery. And *Hartman* carries the Affair so far, as to assert, that even drinking frequently out of a Skull cures the King's-evil. What *Ettmuller* relates, is too ridiculous to mention seriously; which is, that some Soldiers imagine, that drinking out of a Skull renders them invulnerable.

Notwithstanding the Reputation of the human Skull as a Medicine, *Calen*, and, since him, many other Authors, have been of Opinion, that the human Skull is possess'd of no more Virtues than any other Bones, either of Man or Beast, or Hartshorn; and that it is nothing more than an Absorbent.

*Rieger* cautions the Physician, who prescribes this Medicine uncalcined, to take care, that the Skull, which is used, did not belong to a Person who was infected with the Pox, which frequently attacks this Part. *Fuller* is of Opinion, that a Skull is destitute of all manner of medicinal Virtues. And *Erastus* affirms, from Experience, that calcined Hartshorn is preferable to it in every medicinal Intention. *Junker* says, that when exhibited with other Ingredients, it is sometimes found of some Efficacy in Epilepsies, but very seldom when given alone: Hence he justly concludes, that the salutary Effects are owing to the other antiepileptic Drugs administer'd with it.

It is not found, by chymical Analysis, to differ from other Bones: The Water, therefore, Spirit, Oil, and volatile Salt, of a human Skull do not perceptibly differ from those of other Bones. The principal Shop-compolition, in which a Skull is an Ingredient, is the *Pulvis ad Guttetum*.

The Earth found in a human Skull, after being exposed for many Years, is said, by *Pliny*, to be a Depilatory of the Eye-lids.

For an Account of the Moss which grows on the Cranium, see *USNEA*.

**CRANOCOLAPTES, κρανοκολάπτεις.** The Name of a venomous Spider, which is the fourth of the six Species mentioned by *Aetius*, *Tetrabib. 4. Serm. 1. C. 18.*

**CRANTERES, κραντεις.** A Name for those Teeth which grow last of all, and are call'd otherwise *Dentes Sapientie*.

**CRAPAUDINA.** The Toad-Bone. See *BUFORITIS*.

**CRAPULA.** The same as *CRÆPALE*.



**CRASIS**, κρᾶσις, from κρᾶννυμι, to mix. A Mixture, as of Wine and Water. But it is used by Physicians to express a Mixture of *Galen's* first Elements, or Qualities. In this Sense it is the same as **TEMPERAMENTUM**.

**CRASPEDON**, κρᾶσπεδον. A Disorder of the *Uvula*, when it hangs down in the Form of a thin, oblong Membrane. *Arctæus de Causis & Signis Acut. Lib. 1. Cap. 8.*

**CRASSA INTESTINA**. The large Intestines. See **COELIA**.

**CRASSENSA**. A Term coined by *Paracelsus*, to express certain saline, putrefactive, and corrolive Particles, which produce Ulcers, and Tumors of various Forms.

**CRASSULA**. The same as *Anacampteros*, Orpine.

**CRATÆGUS**. The Wild-service-tree.

The Characters are,

The Leaves are single, and not pinnated; the Flower is rosaceous and pentapetalous; the Ovary like that of the Pear; the Fruit is in Shape like a Pear, of the Size of a Berry, containing callous Seeds in membranous Cells.

*Boerhaave* mentions four Species of this Plant.

1. *Cratægus*; folio subrotundo, ferrato, subtus incano. See **ARIA**.

2. *Cratægus*; folio oblongo, ferrato, utrimque virente. *T. 633. Chamæmepilus. J. B. 1. 72. Cotonafter, folio oblongo, ferrato. C. B. P. 452. Cotonafter forte Gesneri. Clus. H. 63. Mespilus, humilis, folio Mali Cydoniæ oblongo, ferrato. H. L.*

3. *Cratægus*; Virginiana; foliis Arbuti. *T. 633. Sorbus, Virginiana, foliis Arbuti. Breyn. Prodr. 1. H. L. 699. THE VIRGINIAN WILD-SERVICE, WITH LEAVES LIKE THE STRAWBERRY-TREE.*

4. *Cratægus*; folio laciniato. *Tourn. Inst. 633. Boerb. Ind. A. 2. 248. Sorbus torminalis, Offic. Ger. 1288. Emac. 1421. Mer. Pin. 115. Aldrov. Dendr. 618. Sorbus torminalis Plinii, Chab. 2. Merc. Bot. 71. Phyt. Brit. 117. Sorbus torminalis seu vulgaris, Park. Theat. 1420. Sorbus torminalis & Cratægus Theophrasti, J. B. 1. 63. Mespilus Apii folio, sylvestris non spinosa, seu Sorbus torminalis. C. B. Pin. 454. Raii Hist. 2. 1457. Synop. 3. 453. Elem. Bot. 503. Cratægus, Sorbus torminalis, Mont. 41. Sorbus Apii folio sylvestris, non spinosa, aliis Sorbus torminalis, Cratægus Theophrasti, Jons. D. THE WILD-SERVICE OR SORB-TREE. Dale.*

The common Service-tree will, in good Ground, grow considerably tall, having a whitish Bark, and Leaves that differ from those of the true *Sorbus*, in not being winged, but somewhat like the Maple, tho' larger and longer, being cut into seven sharp-pointed and serrated Segments, the two next the Stalk being cut in deepest, of a Pale-green above, and whitish underneath. The Flowers grow in Clusters like the true *Sorbus*, of a yellowish-white Colour; and the Fruit is set in the same manner on long Foot-stalks, more than as big again as the common Haws: They are likewise umbilicated at the Top, of a harsh restraining Taste when green, but, when mellow'd, sweet and pleasant, having a stony Substance in the Middle, including two Seeds. It grows frequently in Woods and Thickets, and flowers in *May*, the Fruit being ripe in *September*.

The Fruit is substituted for the *Sorbus fativa*, or true *Sorbus*, being of the same Nature, or rather more astringent and binding: It is good for all Kinds of Fluxes, either of Blood or Humours: When ripe, it is pleasant and grateful to the Stomach, promoting Digestion, and preventing the too hasty Passage of the Food out of the Bowels, and is commended in Fevers attended with a Diarrhœa.

**CRATÆGONUM**. See **MELAMPYRUM**.

**CRATER**, κρατήρ. A large Drinking-cup. But *Rulandus* defines it a Brass Kettle, wide at the Bottom, and narrow at the Top.

**CRATERION**, κρατήριον. A small Cup, Pot, or Vessel.

**CRATIBULA**, or **CRATICULA**. The Iron Bars, or Grate, which cover the Ash-hole in Chymical Furnaces.

**CRAUROS**, κραῦρος. Friable.

**CREA**, according to *Blancard*, is the anterior Part of the *Tibia*.

**CREBER**. Frequent. It is applied to Respiration, and to the Pulse, when the Intervals betwixt each Inspiration, or each Pulsation of the Artery, are very short.

**CREGYON**, κρηγύων. Good. In *Hippocrates* it is apply'd to Symptoms.

**CRËMASTER**, from κρημασθαι, to suspend. The Name of a Muscle of the Testicle, of which there is one on each Side. It arises fleshy from the lowest and fore Part of the Spine of the Os Ilium, and upper Part of the *Ligamentum Pubis*, its Fibres running parallel with those of the *Obliquus Ascendens*, (not with the *Transversalis*, as *Bartholin* objects against *Riolan*) and, almost encompassing the Process of the Peritonæum, descends with it, and is inserted into the *Tunica Vaginalis*, upon which it is spread in several distinct Portions.

Its Use is to draw up and suspend the Testis.

**CREMER**. The Name of a Distemper which is said to be

endemic in *Hungary*, which, by the Description, should be a sort of *Crapula*. It is cured by drinking a small Quantity of any cordial Water.

**CREMNOI**, κρημνοί. The Lips of Ulcers, and the *Labia* of the Female Pudenda.

**CREMOR**, χυμδς, or χυμδς, in *Greek*. It signifies, first, the expressed Juice of any Grain. Secondly, the strain'd Juice of any Grain, particularly Barley, boil'd till it be so soft as to pass thro' a Strainer. See **PTISANA**. Thirdly, it imports the Cream of Milk.

**CREMOR Tartari** is a Preparation of Tartar thus call'd, because properly it is the Cream or Scum of a Decoction of Tartar in Water. See **TARTARUS**.

**CRENÆ**, in Botany, imports Incisures on the Edges of the Leaves of Plants. Hence Leaves with these Incisures are call'd crenated Leaves, which differ from serrated Leaves, in which the Incisures are more acute.

**CREPATIO**, or **CREPATURA**. In Pharmacy *Crepatura* implies the Cracking or Breaking of any Seed in boiling; and this is to be understood, when Seeds are directed to be boil'd *ad Crepaturam*.

**CREPATURA**, in *Paracelsus*, signifies an intestinal Hernia.

**CREPINUM**, in *Paracelsus*, is Tartar.

**CREPITATIO**. The same as **DECREPITATIO**, which see.

**CREPITUS**. A Discharge of Air from the Anus, attended with a Noise.

**CREPITUS LUPI**, in Botany, is that Fungus, which in *English* is call'd Puff-ball. See **LYCOPERDON**.

**CRESERA**, κρησερα. A Sieve for the separating the Bran from Meal.

**CRISPULUM**, κρησπυλι, in *Myrcellus*, is the Herb call'd *Buphthalmum*, Ox-eye.

**CRESSIO**, according to *Blancard*, is a Name for the **CARDAMON**.

**CRETA**. Chalk, call'd by the *Greeks* κρητική γῆ, *Cretan Earth*, because the best Sort was brought from *Crete*, now *Candia*. *Kentman* takes notice of fifteen different Sorts of Chalk. *Geoffroy* defines Chalk a dense, brittle, earthy Substance, which readily stains the Fingers, and sticks to the Tongue, without any Astringency. Many kinds of Earth come under the Denomination of Chalk. Those mention'd by *Dale* are, the *Creta Alba*; *Terra Melitæa*; *Plumbum Nigrum*; and *Terra Selinusæ*.

The white Chalk, or *Cretan Earth*, is thus distinguish'd:

*Creta*, Offic. Mer. Pin. 218. Schrod. 320. Worm. Mus. 3. Charlt. Foss. 2. Worm. 3. Agric. 580. *Terra Creta*, Aldrov. Mus. Metall. 241. *Creta alba, seu Candida*, Dougl. Ind. 28. **CHALK**.

This is now found in many Countries besides *Crete*. It raises an Effervescence with acid Liquors, and is therefore deservedly looked upon as an Alkaline, or absorbent Earth. It is us'd with Success to allay the too great Acidity of the Juices of the Stomach, particularly in the Disease commonly known by the Name of the Heart-burn; and also in Coughs, that arise from a sharp Phlegm. It is likewise serviceable in Hæmorrhages, and is said to kill Worms. In a Word, the Property of all alkaline Earths is not only to absorb Acids, but to allay the Acrimony of the Fluids, and especially to restrain the violent Motion of the Bile, by detaining the Salts and Sulphurs thereof in their fixed Parts. White Chalk is given alone, from ten Grains to a Dram. It is likewise used in the *Decoction Cretæcæ* of *Bates*, which is thus prepared:

Boil half a Pound of powder'd Chalk in three Pints of Water to a Quart; and, when the thicker Parts have subsided, pour off the clear milky Liquor, and add to it a proper Quantity of Sugar of Roses, or of any other proper Syrup.

An Emulsion may likewise be made of this Decoction, by pouring it by degrees on two Drams of each of the four greater cold Seeds, bruised in a Mortar, and then adding to the strain'd Liquor two Drams of Chalk, finely powder'd, and five Ounces of the Syrup of Colt's-foot, Comfrey, or any other suitable to the Intention. The Patient is to drink plentifully of either of these Liquors.

Powdered Chalk is likewise given with Milk, to prevent its turning acid in the Stomach; and, externally, it is commended for drying Wounds, Ulcers, and Fissures in the Nipples. *Geoffroy*.

Chalk, when calcin'd, becomes a Lime, and differs extremely in Virtues from Chalk uncalcin'd. See **CALX**.

Chalk, in large Quantities, put into Springs or Wells of hard Water, is said to render it soft.

*Dr. Stare*, from Experience, affirms, that Chalk absorbs Acids sooner, and more powerfully, than Crabs-eyes, calcin'd Hartshorn, or Coral; and he therefore judges it to be a better Remedy than either of these for destroying Acids in the Stomach.



It is applied externally to running Pustules, *Achors*, and Excoriations; and has been recommended for stopping Hæmorrhages, if apply'd to Wounds by way of Tent. It is farther said to do Service, when applied to an Erysipelas, or to Parts affected with gouty Pains.

Chalk, however, if taken in considerable Quantities, and without proper Cathartics to carry it thro' the intestinal Tube, when it has exerted the Effects intended, is known by Experience to be productive of great Mischiefs, by plaistering, as it were, the Intestines, obstructing the Lacteals, and the Orifices of the intestinal Glands, and thereby causing Cachexies, Indigestions, and various Disorders.

TERRA MELITEA, Offic. Schrod. 317. *Terra Melitenfis*, Charlt. Foss. 4. Worm. 6. Aldrov. Mus. Metall. 253. *Terra ex Melita Insula rffossa*, Calc. Mus. 130. *Terra Melitenfis. Gratia Sancti Pauli*, Mont. Exot. 14. *Terra Sigillata Sancti Pauli vulgo*. EARTH OF MALTA.

This is a cretaceous ponderous Substance, of a whitish Colour, and astringent Taste. It is brought from *Malta* in small Cakes, sealed with the Effigies of St. Paul, with a Viper. It agrees in Virtues with the *Creta alba* above-mention'd. The Earth of *Malta* is said to have received a Benediction from St. Paul, when shipwreck'd upon that Island; and hence alexipharmic Virtues are attributed to it, which it is not likely to be possessed of on that account.

PLUMBUM NIGRUM, Offic. *Nigrica fabrilis*, Mer. Pin. 218. Charlt. Foss. 2. *Messia nigra ad Pnigitem referenda*. Worm. 5. *Oebra nigra*, Phil. Transf. No. 240. p. 183. *An Creta nigra mollis & dura*. Kentman. 7? BLACK LEAD. WADT, KELLO.

This is accounted refrigerating, drying, and repellent; and is sometimes applied to stumous and cold cedematous Tumors.

CRETA SELINUSIA, Offic. Aldrov. Mus. Metal. 248. *Terra Selinusia*, Matth. 1392. Calc. Mus. 126. EARTH OF SELENUSIA.

That is in most Esteem, which is resplendent, white, friable, and readily diluted with a Fluid. It is drying and astringent, and is recommended as a good Topic for Ulcers.

CRETIMON, *κρημινον*. Samphire. See CRITHMUM.

CRIBRATIO. Cribration, in Pharmacy, is the passing any Substance thro' a Sieve or Searce, in order to separate the finer Particles from the coarse, whether the Body cribrated be dry, and in Powder, or moist, as the Pulps of Seeds, Fruits, or Roots.

With respect to Cribration, *Quincy*, a very good Judge of Pharmacy, makes the following Remark, in order to obviate the Mischiefs and Inconveniences, which, thro' Inadvertency or Haste, frequently happen in the practical Shops; which is, that whatsoever is powder'd, the whole Ingredient or Ingredients, with all their Parts to be used, should pass the Sieve, and be all mixed equally together, before any is used; for, thro' Neglect of this, several Medicines, which come under this Management, will be, in their different Parts, of different Efficacies; according as that Part of most Virtue, being more or less friable, may pass thro' first, which will make that much too strong; or remain behind, to the same Prejudice. In Compositions likewise of Ingredients of different Textures and Cohesions, some run thro' much sooner than others; so that there is an absolute Necessity of mixing the Whole carefully, after 'tis all pass'd.

This Admonition may appear superfluous in so obvious a Matter; but I have often found great Mischiefs from a Neglect herein, especially in the powdering such things as Jalap, Ipecacuanha, and the like, whose Virtues lie in the more resinous Parts, which, being the most brittle, break in the Mortar, and pass thro' the Sieve first: And nothing is more common in such things, than to put at once into the Mortar two or three times the Quantity of what present Use calls for, which, perhaps, is only a Dose just then to be made up, or enough to fill a small Glass, which stands to be in Readiness; whereby the first Patients are over-dosed, and the latter, by having only the woody and fibrous Part of the Ingredient, are cheated in their Expectations. *Quincy's Dispens.*

CRIBRATORIUM, or CRIBRUM. A Sieve, or Sierce.

CRIBRIFORME, or CRIBROSUM, or *Os Ethmoides*. The Name of one of the Bones in the Head. See CAPUT.

CRICELASIA, *κρικελασια*, according to the Etymology, signifies driving a Ring, or Circle; from *κρικος*, a Ring or Circle, and *ελαστρον*, to drive. This was a Species of Exercise in Use among the Antients. *Oribasius*, in his *Medicinal Collections*, Lib. 6. Cap. 26. describes it, but not very distinctly, from *Antyllus*. It should seem to be little more than the Diversion of driving a Hoop, which the Boys in *England* take great Delight in. The Hoop was made so large, as to reach as high as the Breast of the Person who used it. The Instrument, with which it was driven along, was of Iron, with a Wooden Handle; and small Rings (*κρικαι*) were fasten'd to the large Hoop, in order to jingle, and divert the Person who exercised himself with it, which *Oribasius* considers as of Importance. This Exercise was recommended for rendering the Limbs pliable, and strengthening the Nerves which were weak. By Nerves, I suppose, Tendons or Muscles were meant.

CRICOARYTÆNOIDÆI MUSCULI. Muscles whose Office it is to open the Glottis. See LARYNX.

CRICOIDES. The Name of an annular Cartilage belonging to the LARYNX, which see.

CRICOS, *κρικος*. A Ring or Circle. *Hippocrates* calls the annular Cartilages, which form the Aspera Arteria, by this Name.

CRICOTHYROIDÆI. Certain Muscles which shut, or close up, the Glottis. See LARYNX.

CRIDONES. Worms which breed in the Skin.

CRIMNODES, *κρινώδες*, of *κρίνον*, Bran. An Epithet for Urine which deposits a branny Sediment.

CRIMNON, *κρίνον*. *Dioscorides*, Lib. 2. Cap. 112. describes *κρίνον* (*Crimmon*) as a coarse Sort of Meal, produced of Zea and Wheat, of which they make Puls, *πυλτος*. *Galen*, in his *Exegesis*, expounds *κρίνον* by *τὰ ἀδυσμερέστερα τῶν ἀλατῶν*, "the coarser or grosser Part of the Polenta;" and, *Comm. 2. in Progn.* he says the *Crimma* (*κρίμμα*) are the larger Particles of the roasted or torrefy'd Barley, which have escaped the due Contusion of the Mill. *Hippocrates* often prescribes for Drink *τὸ ἀπὸ τῶ κρίμμιν ὕδωρ*, "Water in which *Crimmon* has been macerated;" and, *Lib. 3. de Morbis*, he orders a refrigerant Potion to be thus prepared:

Take half a Chœnix (about three Quarters of a Pint) of the coarse *Crimma* of Barley; pour thereon a Congius or Chœas (about six Pints) of Water, and, when the *Crimma* are swell'd, work them with the Hands till the Water becomes white; and then, after putting in it a Pugil of Adiantum, and exposing it for some time to the open Air, exhibit the same.

*Κρινώδες* *ὑποστάσεις*, in *Hippocrates*, are Sediments in Urine resembling *Crimma*, *Progn.* where *Galen*, on the Place, condemns such a Sediment as proceeding from thick Blood highly adust, and an unequal Colliquation of the carnosus Parts. *Hippocrates*, in another Place, says, that such a Sediment, in Fevers, portends a long Illness; on which *Galen* writes, that such Hypostases in Urine are found by Experience to prognosticate the worst of Events; for all who made such Urine dy'd, or recovered very slowly, and with much Difficulty. The same Author, in his first Book of *Crisis*, says, that this Hypostasis indicates two Affections, which are, a Colliquation of the more solid Parts, and a violent Estuation, and high Adustion, of the Blood. Again, *Com. 3. in Lib. 6. Epid.* he says, that *Crimnodes Hypostases* indicate a Colliquation of the Parts of the Body, and especially of the Liver; if they are of a remarkable Thickness and Hardness, but not whitish, they signify a Colliquation of the Flesh; but, when black, they rather indicate a Wasting of the Spleen.

CRINATUM, *κρινάτων*, from *κρίνον*, a Lily. An Epithet of a Thymiana, or Suffumigation, in *P. Ægineta*, Lib. 7. Cap. 22.

CRINES, *τελχες*. The Hair. See CAPILLUS.

CRINITUS, from *Crinis*, a Hair, *κρινένμενος*. An Epithet of Plants, whose Roots abound with Capillaments, or small Fibres, like Hairs.

CRINOMYRON, *κρινόμερον*, from *κρίνον*, a Lily, and *μύρον*, Ointment. Ointment of Lilies, consisting of Lilies with some Aromatics. It was also call'd *Ægyptium album* and *Sustinum*. See ÆGYPTION.

CRINON, *κρίνον*. A Lily.

CRINONES. Worms which breed in the Flesh. See DRACUNCULI.

CRIOGENES, *κριογενής*. An Epithet for certain Troches mentioned by *Paulus Ægineta*, Lib. 7. Cap. 12. and by him recommended for cleansing sordid Ulcers.

CRIOMYXUS, *κρίομυξος*. An Epithet for Persons abounding with Mucus in the Nose.

CRISIMOS, *κρίσιμος*. Critical.

CRISIS.

The Doctrine of *Crisis*, critical Days, and their various Effects, is not only useful, but absolutely necessary, in the Practice of Medicine. Of this *Hippocrates* gave us not only the first, but, at the same time, the most full and rational Account. Many, and, among the rest, *Galen* and his Followers, have made Attempts of the same Kind; but they have been so far from enriching and improving this useful and important Piece of Knowledge by Experiments and Observations, that they rather seem in some respects to have perverted and corrupted it. For this Reason we shall have recourse to *Hippocrates* himself, draw the Doctrine of *Crisis* from its original Source, and confirm it by Reason and Experience. By this means we shall be the better able to discover the Superfluities, the Defects, and the Errors, of the several Hypotheses advanced with respect to *Crisis*.

But it seems necessary to premise, that the Word *Crisis* is used in different Senses both by the Antients and the Moderns; for some frequently mean no more by a *Crisis*, than the Excretion of any noxious Substance from the Body. Thus *Hippocrates*, in his Book



Book *de Arte*, calls the Excretion of a corrupted Bone a *Crisis*: Others, with *Galen*, take the Word *Crisis* for a Secretion of the noxious Humours made in a Fever; for the Word *κρίνειν* signifies to separate, or, as it were, to pass thro' a Sieve: Others use the Word *Crisis* for the critical Motion itself, and the violent Perturbation produced in the Actions of the human Body; or, as they choose to call it, the Contest or Struggle of Nature with the Disease, in which the Period when the Disease arrives at its greatest Height, is the critical and important Moment, which decides with respect to the Death or Recovery of the Patient.

*Galen*, in his *Commentary* on *Aph.* 13. *Seet.* 2. defines a *Crisis* in Fevers a sudden and instantaneous Change, either for the better or the worse, productive of Recovery or Death: But Physicians often confound the *Crisis* itself with the critical Day or Time.

But, as *Hippocrates* was the first who made mention of *Crisis*, and critical Days, we shall here inquire, in what Sense he used this Word. From his Writings 'tis therefore obvious, that by the Word *Crisis* he generally meant the Judgment which is, or at least ought to be, formed, with respect to the lucky or unlucky Termination of the Disease, from the Symptoms of the Disease itself, and the particular Habit and Constitution of the Patient. Hence arise good and bad, lucky and unlucky *Crisis*. And, in his Book *de Affect.* he uses these Words: "A *Crisis* is said to happen in Diseases, when they are either increased or diminish'd, changed into others, or totally removed." By the Word *Crisis* he also frequently means the Solution of a Disease: Hence, in his *Præceptiones*, he uses these Words; *κρίσις ἐστὶν ἀπόλυσις νόσου*, "a *Crisis* is the Solution of a Disease." Every-where also, in the Writings of *Hippocrates*, the following Methods of Speaking occur to the Reader: *A perfect Crisis happen'd to such a Patient, or such a Disease, on the seventh or fourteenth Day*; that is, there was a Solution of the Disease, and the Patient recover'd.

But, that we may be enabled to form a just and adequate Idea of the *Crisis* of acute Distempers, it is necessary to recount all the Circumstances requisite to a *Crisis*. In the first Place, therefore, a *Crisis* has only a Reference to acute Disorders, and more especially continual Fevers; for a λύσις, or Solution, is applied to those Turns which chronical Diseases take. Secondly, a *Crisis* only happens on certain Days of the Disease; the most usual of which are, the seventh, or the Time approaching nearest to the Half of that Number, from the Beginning of the Disease; for the other Days contribute little or nothing to a *Crisis*. Thirdly, on these Days the Physician is to judge of the Change of the Disease, whether it is like to terminate in a Recovery, Death, or some other Disease. Fourthly, on the critical Days the Physician is to form a Prognostic, or Judgment, from certain Signs; among which not only the Urine and Excrements, but also the Pulse and Strength, of the Patient are to be adverted to. These are the Things which, in my Opinion, complete the Notion of a *Crisis* in acute Distempers, and explain what the skilful Antients meant by it. Of how great Importance, therefore, the Doctrine of *Crisis* is in Practice, is sufficiently obvious; for what can be of more Use, than that, according to the Directions of provident Nature, certain stated Days should be observed by the Physician, in which he is to have an Eye to past, present, and future Circumstances, and from them form a Judgment or Prognostic of the Disease?

We shall, first of all, quote the most plain and unexceptionable Passages from the Works of *Hippocrates*, which point out, evidently and distinctly, on what Days the *Crisis* of Fevers happen. The first of these is in his Treatise *de Diebus Judicatoriis*. "Crisis, says he, happen to Fevers on the fourth Day, the seventh, the eleventh, the fourteenth, the seventeenth, and the twenty-first. But, even in these acute Disorders, the *Crisis* sometimes happens on the thirtieth, the fortieth, and the sixtieth Day." In his *Aphor.* *Seet.* 2. *Aph.* 23. and 24. he uses the following Words: "Crisis happen to acute Diseases in fourteen Days. The fourth is the Index of the seventh; the eighth Day is the Beginning of the second Week: The eleventh is also to be adverted to, because it is the fourth of the second Week. The seventeenth is also to be consider'd, because it is the fourth from the fourteenth, and the seventh from the eleventh." The same Author, in his *Coacæ Prænot.* tells us, "That the most gentle Fevers, and such as are accompanied with the safest Signs, terminate on the fourth Day, or sooner; but those which are highly malignant, and accompanied with the worst Signs, remit on the fourth Day, or sooner: Their first Attack, therefore, ends thus; but their second is protracted to the seventh, and their sixth to the twentieth Day." In his third Book *de Præfagiis*, he informs us, "That we must advert to the Disease from the first Day, and observe every fourth Day, by which means we may evidently perceive what Turn the Disease will take." According to this Author, a regular *Crisis* happen'd, in burning epidemical Fevers, in seventeen Days. Thus, in his Treatise *de Partu Septi-*

*mestri*, he uses the following Words: "In most Diseases the most considerable Days are the first and seventh; for these are of great Importance, not only in Diseases, but also with respect to the Fœtus; for most Abortions happen on these Days." And, a little after, he has the following Words: "The Physician, who intends to prognosticate with Judgment and Certainty, must observe and contemplate all Days; but, of those which are even, the fourteenth, the twenty-eighth, and the forty-second. The Physician must also calculate by Ternaries and Quaternaries; that is, by the Number of three and of four Days."

The Opinion of *Hippocrates*, therefore, is, as is obvious from what has been said, that acute and continual Fevers terminate by Septenaries, if their Solution or Termination is to be salutary. But this Solution happens by sufficient Evacuations, either by Sweat, Urine, Stool, Hæmorrhages, or Spit, on the above-mention'd critical Days; for, if they happen on any other Days, they are accounted less salutary, and are generally symptomatical. Accordingly, *Hippocrates* informs us, in *Aph.* 36. *Seet.* 4. "That Sweats in Fevers are beneficial, if they begin upon the third, fifth, seventh, ninth, eleventh, fourteenth, seventeenth, twenty-first, twenty-seventh, thirtieth, or thirty-fourth Days; for these Sweats determine the Disease: But those which happen otherwise, import a great deal of Trouble, that the Disease will be of long Continuance, and Relapses." *Hippocrates* is back'd in this Sentiment by *Galen*, who has the following Words in his Treatise *de Diebus Judicat.* "Those Sweats which arise on the indicating Days, which are not critical, prognosticate much Trouble, and the Protraction of the Disorder; for those Evacuations, which are not critical, are either fatal, or afford a very bad Prognostic." In the same Book he informs us, "That he never saw a *Crisis* happen on the twelfth or sixteenth Day; and that *Crisis*, happening on the sixth Day, are imperfect, attended with unlucky Symptoms, and imminent Danger." But *Hippocrates* pronounces that Sweat most salutary, which, on the critical Days, determines the Disease, as he informs us in his *Coacæ Prænot.* and that the Sweat is bad, which, appearing in a Fever, does not alleviate, but protract it. This is also confirm'd by the fifty-sixth Aphorism of the fourth Section: "If, says he, Sweats happen in a Fever, without causing a Remission, the Sweat is bad; for the Disease is protracted, and superfluous Humidity indicated."

But, according to *Hippocrates*, the *Crisis* is salutary, and the Disease determined, if, on the critical Day, the Urine is well concocted; that is, neither white, nor thin, nor copious, but deep-colour'd, of a proper Consistence, and such as deposits a Sediment. There is a memorable Passage, relating to this, in *Lib.* 1. *Epid.* where he uses these Words: "Urine which, in Fevers, is crude, unconcocted, and whose Sediment is bad, indicates either a Removal of the Crisis, Pains, Protraction of the Distemper, Death, or Relapses." In the seventy-first *Aph.* of *Seet.* 4. he informs us, "That if a *Crisis* happen upon the seventh Day, the Urine has a red Cloud in it upon the fourth Day, and other Circumstances accordingly." And, in the subsequent Aphorism, he tells us, that "Urines, which are very pellucid and white, are bad; and that such Urines are generally discharged by phrenetic Patients." With respect to the Signs of a good *Crisis*, taken from the Urine, he makes the following Observations in his *Coacæ Prænotion.* "In the Beginning of a Fever, the Urine which has a white and smooth Sediment, infallibly denotes the speedy Solution of the Disease. Reddish Urine, with a smooth and reddish Sediment, if it appears before the seventh Day, terminates the Disorder; but, after the seventh Day, this Effect is more slowly produced, and the *Crisis* is at a greater Distance. Urine which, on the fourth Day, has a red Cloud, terminates the Disease on the seventh, if other Circumstances are favourable. Bilious Urine, and such as has a small Quantity of thin Sediment, and which is changed from better to worse, denotes, that the Disease will be protracted. But, when Urine of this Kind is discharged for a long time, especially about a *Crisis*, the Patient is not free from Danger. But aqueous and white Urine, in protracted Diseases, is always the Sign of a difficult *Crisis*, and an unlucky Prognostic." Again, in the second Section of the third Book of his *Epidemics*, he tells us, "That a Patient, who, on the second Day, became deaf, and his Urine thin and pellucid, died on the fifth Day." And, in *Seet.* 3. he tells us, "That another Patient, whose Urine was thin and white, died phrenetic on the fourth Day."

A Solution of Fevers sometimes also happens by Eruptions of Blood, or an Excretion of the Fæces, on the critical Day. With respect to this, there is a memorable Passage in *Hippocr. Epidem. Lib.* 1. *S.* 115. "In epidemical burning Fevers, in which the Blood is copiously discharged from the Nostrils, the Patients are generally recover'd by this means; and I know of none who died in this Constitution, provided the Blood was copiously discharged. In *Philiscus*, *Epaminon*,

"and



“ and *Silenus*, a few Drops of Blood were discharged from  
 “ their Nostrials on the fourth and fifth Days, and they died :  
 “ But there was an Eruption of Blood in many, especially  
 “ young and vigorous Persons ; and those who had not this  
 “ Eruption generally died. But old Patients were seiz'd with  
 “ a Jaundice, or a Diarrhœa, or they became dysenterical.”

Acute Affections of the Breast, as a Peripneumony, attended with a Fever, are abated by Sweat as well as Spitting. Our very excellent Author before quoted, in his Book of *Critical Days*, pronounces of a pleuritical Fever, that “ it comes to  
 “ a Crisis on the seventh Day, and, when longest, on the four-  
 “ teenth.” And, of a Peripneumony, that “ the Patient  
 “ labours under the Symptoms at least fourteen Days, and at  
 “ most twenty-one, and coughs violently all the while ; ex-  
 “ pectorating at the same time, first of all, much frothy Spit.  
 “ On the seventh and eighth Days, when the Fever is at its  
 “ Height, and the Peripneumony in a humid State, a thicker  
 “ Matter is expectorated, otherwise not. On the ninth and  
 “ tenth Days the Spit becomes of a pale Green, and some-  
 “ what bloody : From the twelfth to the fourteenth, it is  
 “ copious and purulent. Such are the Symptoms when the  
 “ Patient is of a humid Nature and Constitution, and the  
 “ Disease violent ; but when the Disease, as well as the Pa-  
 “ tient, are of a dry Nature and Constitution, the Symptoms  
 “ are different.”

We have hitherto consider'd the Solution of Fevers, which usually happens on critical Days, by favour of several sorts of Excretions ; and now proceed to treat of those imperfect Crises and Solutions which are effected by an Abscess, or, to use a Term of *Hippocrates*, by an Apostasis, and Settlement on other Parts, especially the Extremities. Among Abscesses we may justly reckon Erysipelas, Buboes, arthritic Pains, and Tumors, Spots, Pustules malignant or otherwise, purple Eruptions, Small-pox, and several exanthematous Eruptions of the like Kind. It is Nature herself which makes these Secretions, also, on stated Days, and oftentimes to the great Advantage of the Patient, who perceives a Mitigation of his Fever, and its Symptoms, tho' not a sufficient and plenary Solution. As for an Erysipelas, it is known to attack the Patient with a violent Fever, which is resolved on the Appearance of a Tumor in the Skin ; and *Hippocrates* reckons an Erysipelas among critical Abscesses, as is very evident from *Lib. 2. Epid. Sect. 3.* where he says, ὅποσα ἀσθμῶς ἀφανίζεται δύσχευτα, καὶ θῖον τῇ τῷ πολέμαρχῳ παύσκει ἐνυσίπτελας. “ Whatever disappears, without  
 “ the proper Sign of a Crisis, determines unfavourably for the  
 “ Patient, as it happen'd with the Erysipelas of *Polemarchus's*  
 “ Maid-servant.” And, in his Book *de Judicationibus*, and in *Cōac.* to the critical Solutions of Fevers he subjoins Pains and Tumors of the Joints, Knees, and Hips. Thus again, *Lib. 3. Epid. Sect. 1.* he says, that “ the third Patient, on the  
 “ twentieth Day, had an imperfect Crisis by a Pain of the  
 “ Right Hip.” And, in short, among Abscesses, or Matters absceding under the Skin, he reckons both putrid and suppurating Tubercles, and also Pustules, as appears from the second of the *Epidemics*, *S. 45.* under which, no doubt, the Measles and Small-pox may be included. Among Abscesses are justly to be reckon'd those Tubercles, or Tumors about the Ears, by which Fevers are resolved ; as may be infer'd from our Author, who, *Lib. 1. Epid. Sect. 1.* says, “ many had Tubercles about  
 “ one Ear, and more about both, sitting up, and walking  
 “ about, without a Fever ; tho' some of them were a little  
 “ hotter than ordinary. These Symptoms happen'd to young  
 “ Men, to Persons of vigorous Habits, and generally to those  
 “ who were accusom'd to Exercise.” But the most memorable Passage, relating to the several Manners in which Fevers are determined, is found in his Treatise *de Viētus Ratione in Acut.* where, speaking of a certain Kind of burning Fever, he adds the following Words : “ If no Hemorrhage happens from  
 “ the Nostrials, if an Abscess does not appear about the Neck,  
 “ if the Patient is not seiz'd with a Pain of the Legs, if he  
 “ does not expectorate thick Spit, if he is not afflicted with a  
 “ Pain of the Hip, and if his Pudenda are not livid, then the  
 “ Disease is not determin'd. The Tension of a Testicle is also  
 “ a Symptom of an approaching Crisis.” A pestilential Carbuncle ought also to be enumerated among Abscesses.

Thus we have taken the Doctrine and History of Crises, and critical Days, from *Hippocrates* himself, who probably first discover'd them, and generously convey'd the Discovery to Posterity. *Galen*, the faithful Follower of *Hippocrates*, confirms the Sentiments of his Master, with respect to Crises, almost in every Instance. He explains the Nature of critical Days ; extols the salutary Virtue of the seventh in particular ; but condemns the sixth as treacherous and fallacious : The former he compares to a King, who sets his oppress'd Subjects at Liberty ; and the latter to a Tyrant, who, without Mercy, exerts his Power, and does all the Mischief he can ; for the sixth Day is productive of Danger, and imperfect and unlucky Crises, as he informs us in *Lib. 1. de Diebus Decretoriis*. But *Galen* has this peculiar to himself, that he also reckons the ninth Day

among the salutary critical Days : Hence, in the Part already quoted, he informs us, that, in one Summer, he knew above three hundred Patients labouring under acute Disorders, in which a Crisis happen'd either on the seventh or the ninth Day. He deserves our Observation, also, when he writes, that he saw none die who had a Crisis after Concoctions ; see *Lib. 3. de Crisibus, Cap. 3.* and that there is never a Crisis without a great preceding Perturbation, in which Nature is on a sudden, and in a most violent manner, irritated by the Disease : Hence he asserts, that a Crisis always happens at the Height of the Distemper ; that the preceding Day and Night are most troublesome and dangerous ; and that none was ever freed from the Disorder, without some remarkable Evacuation, or an Abscess : For which Reason, when a Distemper ends in an Excretion or Abscess, he calls it a Crisis. To proceed, *Galen*, *Lib. de Diebus Decretoriis*, calls the seventh, fourteenth, and twentieth, *prime critical Days* ; on which, he says, more recover than die. A second Order of critical Days he calls *inter-nuncial Indices*, because on them are plainly seen the Signs of a future Crisis on the seventh Day, provided the Excrements are concocted. These are the semi-seventh Days. The rest, between the Indices and the truly critical Days, he calls *inter-calary*, and also *provocatory Days*, because they irritate Nature to Excretion ; such are the third and the fifth in the first Week. The other Days are call'd *vacant*, because they neither determine, indicate, nor provoke ; and also *medicinal*, because on them the Physician treats his Patients with Medicines, and Cathartics may be safely administer'd. And this also is what the divine *Hippocrates* has express'd in plain Terms, *Lib. 4. de Morbis* : “ Whoever, labouring under a continual Fever, says  
 “ he, were treated with Cathartics on even Days, were never  
 “ purged to Excess ; but they who had Cathartics administer'd  
 “ to them on odd Days, were all too much purged, and many  
 “ of them died.” These Days are by some call'd *artificial critical Days*, because they determine ; that is, effect a Solution by medicinal Art. See *Laurentius, de Crisibus*.

Having thus propos'd and explain'd what we thought useful and necessary to be known, concerning the Crises of acute Diseases, and critical Days, from the celebrated Writings of *Hippocrates* and *Galen*, before we interpose our own Judgment, and confirm what shall be found agreeable to Truth and Experience, by just Arguments, it will be proper to produce and consider those Authors, and their Arguments, who call in Question this Doctrine of Crises. The first, among the Antients, was *Asclepiades*, who, according to *Cælius Aurelianus*, *Lib. 1. Cap. 14.* declares, that there are no such stated Days as they call critical in Diseases ; and that there are no Solutions of Diseases at certain and due Periods of Time. With this very antient Author agrees *Celsus*, who, *Lib. 3. Cap. 4.* expressly says, “ There arises a Question concerning Days, be-  
 “ cause the Antients principally regarded odd Days, and call'd  
 “ them *κρίσιμες*, “ critical,” as if a Judgment were to be  
 “ pass'd on the Patient on those Days. This was by *Ascle-*  
 “ *piades*, as a vain Opinion, justly rejected ; for the Patient,  
 “ he said, was neither in more or less Danger on any Day,  
 “ because it was even or odd ; for sometimes the even are the  
 “ worst Days. Sometimes also, in the Disease, the Days take  
 “ a new Turn, and those are most afflictive, which used to be  
 “ the most favourable : But the Numbers of *Pythagoras*, which  
 “ were highly celebrated in these Times, deceived the Antients ;  
 “ for it is the Duty of a Physician not to number the Day,  
 “ but narrowly to observe the Access of the Paroxysm.” Among the Moderns may be reckon'd *Helmont*, who, *Lib. de Tempore, Sect. 53.* endeavouring to explode the Observation of Crises in Practice, “ I have observed, he says, that there never  
 “ is a Crisis, when a Physician, who is Master of his Art,  
 “ takes care to remove the Disease before the Crisis is ex-  
 “ pected ; for as Nature delights in its ordinary Motions, and  
 “ is accusom'd to them, and is willingly govern'd by the  
 “ Unity of the moving Power ; so, when the whole Affair of  
 “ the Disease is entrusted to its sole Management, it exerts it-  
 “ self in exciting stated Crises, which would otherwise, either  
 “ by the Goodness of a Medicine, be anticipated, or, by its  
 “ Badness, retarded and destroy'd ; by which means the Crisis  
 “ is prolonged from the fourteenth Day to the fortieth. It is  
 “ the Part, therefore, of a good and faithful Physician to  
 “ neglect Crises ; and it were better for those Patients, who  
 “ recover by a Crisis, to have no Physician, and much more  
 “ for those who have a slow Crisis.” The same Author, *Lib. de Feb. Cap. 2. S. 8.* says, “ a true Physician ought to  
 “ subdue the Disease before a Crisis : If he acts otherwise,  
 “ nothing at all can be ascrib'd to the Assistance of the medi-  
 “ cinal Art.” “ For if a Crisis,” as *Langius, Miscell. Quæst.*  
 “ 4. infers, “ is to be expected in the Cure of Diseases, Me-  
 “ dicine must certainly be a superfluous and useless Profession,  
 “ because the whole Affair of Curing is by this means com-  
 “ mitted, in a manner, alone to Nature, and not to the Art,  
 “ nor its Professor.” Of the same Opinion is *Faber*, who, in his *Panchymag. Tom. 3.* says, it is the Duty of a Physician to cure



cure a Disease before and without a *Crisis*. And, to name no more, the Count *de Filisio*, *Lib. de Fato*, asserts, that this Number of Days is not always observed in Practice; and that *Crises* often happen on other Days.

There are, besides these before-mention'd, another Set of Authors, who do not, indeed, call in question the Existence and Use of critical Days, but suppose the Observation of them to be of Service in *Greece* only, and not in our Countries. Thus the celebrated *Waldschmid*, in *Fundament. Med.* speaking of a *Crisis*, advises us "not to be too curious in our Inquiries into the Causes of critical Mutations, because, in our Times and Countries, such *Crises* no longer take place; for which Reason also our Predictions in acute Diseases are not so certain and infallible, as they are represented to be in *Hippocrates*, who relates such Phænomena, or Signs of Distempers, as seldom or never appear to us." And *Eisenschlad. Pæd. Astron. Sect. 3.* says, "In our German Countries, and particularly in our own Climate and Soil, perfect and salutary *Crises* seldom happen." *Hollerius* also, in *Aph. Hippocr.* observes, "that, in cold and northern Countries, perfectly critical Evacuations are rarely to be expected." As to the Cause why perfect *Crises*, happening on critical Days, are so rarely observed in our Climate, some ascribe it to the Temperature of those Countries. See *Wedel.* in *Dissert. de Diebus criticis*. *Bagliivi*, in *Prax. Med.* seems to be of this Opinion, where he grants, that in *Greece* acute Diseases end in perfect *Crises*, but not in our northern Countries, which, he thinks, is to be ascrib'd to the Purity and Thinness of the Air, which, in *Greece*, as it is in all the adjacent eastern Countries, is endu'd also with a great Elasticity; whereas our Air, which is impregnated with aqueous and gross Vapours and Impurities, must at all times render the Humours of the Body more impure, so that they can never attain to a perfect *Crisis* or Despumation.

We are now to give some Account of the Causes of those wonderful Effects of critical Days, in acute Distempers, according to the Sentiments of the Antients. Many of the Antients agree in making the efficient Cause of critical Motions to be no other than the Nature of the Body, the Soul, or Principle of Motions in our Body, which rules and governs the whole Machine, which removes Diseases, which, as it is expressed, *Lib. 6. Epid. Sect. 5.* is informed by none, nor ever learned any thing, and yet effects, in the most proper Way, what things are to be done, and where they ought to be done; which encounters with Diseases, and fights it out to the last, combating with great Violence and Obstinacy; which secretes Good from Bad by proper Passages, in due and convenient Seasons, and for a good and necessary End; which excites Commotions of such a Nature, and in such a Proportion and Degree, as are correspondent to the present morbid Matter; and this it does of itself, spontaneously, and from an innate Principle, not by Compulsion from any necessary external Causes, as it is something incorporeal, which cannot be affected or altered by corporeal things. Some add, as a more remote Cause, an auxiliary astral Nature, especially the Influence of the Moon, according to her Aspects from salutary or unfriendly Planets, as she enters the Signs of the Zodiac.

Thus have we given you an Account of *Crises*, and critical Days, from the Writings of the Antients, with the different Opinions concerning their Effects: We are now to declare and explain our own Opinion, in relation to what there may be of Truth or Falshood in this Doctrine; as whether there be any critical Days, and why they are of so much Importance in the Practice of Medicine as the Antients would have us believe. Now, since Experience is of most Service in our Inquiries after Truth in Physical and Medicinal Affairs, as being the first Foundation of all Truth, which consists in Fact, and of Medicinal Ratiocination, it seems proper to be also first consulted on this Occasion. Wherefore, divesting ourselves of all Prejudice from Authority, we shall fairly propose what we have learned, from attentive Observation, concerning the Solution of Fevers, especially on certain and stated Days. First, then, it is certain from undoubted Experience, that, in Fevers, the Ephemera and Synochas are generally resolved, the first in four-and-twenty Hours, and the other on the fourth or seventh Day, by Sweat, or a Hæmorrhage. The Pleurisy, or Peripneumony, is milder and more remiss about the fourth Day, when bloody Matter is expectorated by Coughing; and, about the seventh Day, it is usually resolved by Sweat, and a free Expectoration. If the Disease be pretty severe, it is prolonged to the tenth, and sometimes to the fourteenth Day; but, if it proceeds farther, it turns to an Empyema. An Erysipelas of the Stomach, indicated by a Lipytia, is resolved, on the fourth or seventh Day, by an Evacuation upwards or downwards, and also by Sweating. An inflammatory Fever of the Liver meets with a Solution on the seventh, eleventh, or fourteenth Day, partly by Sweat, and partly by a Flux of the Belly; that is, if the concave Part of the Liver be inflamed. A Distillation from the Nostrils succeeds an internal Inflammation of the Viscera, and is sometimes salutary, but seldom or never perfectly resolves the Disease. Simple Triens very often leave the Patient, spontaneously, after

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seven Fits. See *Hippoc. Lib. de Judic. Sect. 4.* Billous burning Fevers are resolved on the seventh Day generally, or else on the fourteenth Day, by Sweat, and a Looseness. See *Hippoc.* in the last-mentioned Book. Petechial Fevers lose their Violence on the seventh, eleventh, fourteenth, and sometimes, tho' but rarely, on the twenty-first Day. The Pestilence loses a great Share of its Malignity on the fourth, seventh, or eleventh Day, if the Patient recovers; and, in short, most continual Fevers generally come to a Period on the seventh, eleventh, or fourteenth Day. Malignant and pestilential Fevers are resolved more by Stools than Sweat, as I have often observ'd, and as *Galen* remarks, *Lib. de atra Bile, Cap. 4.* And *Gerhardus Columba*, in *Lib. de Febr. pestilent.* wonderfully admires the Effects of Excretions of the Belly by Stool; where he says, that "in that pestilential Constitution he speaks of, almost all who had plentiful Discharges downwards, tho' attended with the Signs of Crudity, at last recovered; for," says he, "as the Looseness proceeded, the Signs of Concoction every Day more and more appeared, and the Disease became milder, the Flux continuing till the Patient was judged out of Danger."

With respect to Fevers, and their Commotions, which are not wholly resolved, but yet remitted by an Abscess, or Settlement of the noxious Matter on some Part of the Body, the Case, in regard to Time, may be thus represented: An Erysipelas attacks the Patient, in a very violent Manner, with a Fever, which on the semi-seventh Day, that is, between the third and fourth Day, quite ceases, the Matter being propel'd to the Superficies of the Body. The Small-pox and Measles come on with violent Symptoms, and a high Fever, which also, on the semi-seventh Day, by the Propulsion of the acrid and caustic Matter to the Skin, is not only mitigated, but the Severity of the Symptoms is generally much abated. In the Purple Fever, about the fourth Day, the acrid and pernicious Humours being expel'd and driven to the Superficies, the Violence of the Symptoms is quite subdu'd. The Petechiæ always come forth on the fourth or seventh Day, with some Relief to the Patient. Arthritic Fevers, if violent, are soon mitigated, by diverting the Course of the acrimonious and caustic Humour upon the Joints. Bilious Fevers, on the seventh, ninth, eleventh, or fourteenth Day, are relieved by the coming on of a Jaundice. Hence *Hippocrates, de Judic. Sect. 10.* was in the right when he says, "If a Jaundice comes on at the going off of a burning Fever, the Patient is not usually molested with Sweats, nor has an Abscess form'd in any Part, but recovers his Health." A Tumor in the auditory Passage is a good and salutary Apoplexy; and Deafness thence proceeding is also a good Sign, which, in the Hungarian Fever, and acute ones, attended with a Pain of the Head, and a Delirium, if it came on a critical Day, and continued, was commonly a very happy Prognostic of Recovery. And this was observed also by *Hippocrates, Sect. 2. Aph. 60.* The Reason of this particular Observation is obvious; for it is a Sign of a robust and vigorous Constitution, when Nature propels a viscid, and, without doubt, a sulphureous Humour to the extreme and less noble Parts, as also to the Emunctories; such as, in this Case, the Glands of the auditory Passage are. Hence we may clearly understand that Assertion of *Hippocrates*, in his Treatise *de Judicationibus*, "That those who become deaf before the Solution of the Fever, must necessarily become delirious: But the Solution is brought about either by an Hæmorrhage from the Nose, an Evacuation of bilious Matter by Stool, a corroding Dyfentery, or a Pain of the Hips, or Knees."

Neither must we forget, that, in this Part of the World, Translations are very common in acute Fevers, when Nature, become weak, does not expel and eliminate from the Body the peccant Blood or Matter, but conveys it to the internal Parts, both at the critical, and at other Times. These Translations, therefore, are almost all productive of the worst of Consequences; for they arise from the Stagnation, which is the principal Source of all the unlucky Symptoms, and of the Patient's Death. By this means are produc'd Phrensies, Convulsions, Twitchings of the Tendons, Drowsiness, and Apoplexies, which draw their several Origins from too large a Quantity of Blood stagnating in the Vessels of the Brain. Inflammations also, and Suffocations of the Breast, arising from a Congestion of Blood in these Parts, prove mortal. In like manner Inflammations, producing a Quinsy, Aphthæ, accompanied with a Dryness of the Mouth, an insatiable Thirst, and a Difficulty of Breathing, arising from Stagnations of Blood in the Fauces, the Œsophagus, and its Orifice, generally prove fatal. *Hippocrates*, in the fifteenth *Aphor.* of his fourth *Sect.* in a continu'd Fever pronounces a Difficulty of Breathing, accompany'd with a Delirium, a mortal Sign. In the fifty-second *Aphor.* of the same *Sect.* he also pronounces an involuntary Shedding of Tears, and a difficult Deglutition, fatal Signs in a continued Fever; for these Symptoms indicate, that some Part of the Blood already stagnates, and is fixed out of the Course of the Circulation.



With respect to the Solution of Fevers, Experience has confirmed, that the following Observations deserve our highest Attention.

First, In every salutary Determination or Solution of a Fever, either about or on the critical Day, a remarkable Evacuation, either by Sweat or Stool, almost always happens. This Evacuation is so copious, that it sometimes continues for some Days; and not only when this Evacuation is present, but also before and after it, the Pulse is more calm, the Strength is increased, the Mind acquires a Vigour and Energy it had not before, the Sleep becomes quiet and uninterrupted, and the preternatural Heat ceases.

Secondly, When large Evacuations happen either upon the critical or other Days, whilst, at the same time, the Violence of the Disease, and its several Symptoms are not abated, but rather remain in their former State and Condition, this is a very bad Sign.

Thirdly, It is a frequent, and, at the same time, an infallible Observation, that as the Solution which happens on the critical Days, with Evacuation, and the Relief of the Patient, is lucky and salutary, so the Evacuations which happen at other times, however they may seem to afford some Relief to the Body, are yet to be suspected as unsafe. Hence *Hippocrates*, in the fifth Section of the second Book of his *Epidemics*, condemns those Evacuations which, happening not upon the critical Days, relieve.

Fourthly, It is observed, that when the Small-pox, Measles, petechial and purple Fevers, break out on the first or second Day of the Disorder, they are always of the worst Kind.

Fifthly, A large Quantity of thin Urine is in no Stage of a continual Fever observed to be salutary.

Sixthly, Before the Propulsion of exanthematous Effluences, and the driving of the peccant Matter from the internal to the external Parts, the Disorder is generally more violent, and the Symptoms more exasperated. Hence *Hippocrates*, in the thirteenth *Aphor.* of *Secl.* 2. says, that the Night before the Crisis, the Disease is very violent, but more moderate the Night after it. But this does not always hold true, with respect to the full and perfect Solution of Fevers. Hence it is not an universal and infallible Rule, that the Solution of a Disease cannot happen without a previous Perturbation of Nature, and an Exacerbation of the Disorder, and its several Symptoms.

Seventhly, Tho', in acute continual Fevers, there is never a total Intermission of the Symptoms, yet there may be a certain Remission, which is succeeded by an Increase, or fresh Exacerbation, of the Symptoms; and this is often preceded by a Shivering and Rigor, during which both Impostumations and Translations are to be apprehended.

Eighthly, In general we are to observe, that, in numbering or computing the critical Days, we are not to begin from the Lassitude of the Patient, taking his Bed, or his bad State and Disposition, but from the febrile Motion, which is known from the Shivering, and the Change of the Pulse; I mean, when it begins to be swifter.

Ninthly, Tho' every fourth and seventh Day are more to be observed than the rest, yet the Observation of *Hippocrates* and *Galen*, that the fourth indicates the seventh, and the eleventh the fourteenth, does not always answer in these Parts; but the Signs of Concoction in the Urine appear sometimes on other Days: Wherefore we are every Day to inspect the State of the Sick, the Strength and Excretions.

Tenthly, Bilious burning Fevers, and also inflammatory ones, attended with violent Symptoms, especially in Subjects of a more sensible Constitution, have always more perfect Crises at the stated Times, than malignant putrid Fevers, in impure, cacochemical, and infirm Subjects, which, though they terminate within fourteen Days, yet keep not so exact Time, nor critical Days.

Diseases are not only resolved on critical Days, but are often exasperated, and the Patient dies on those Days. Hence it is observed, that the seventh, eleventh, and fourteenth Days are fatal to Multitudes under inflammatory Distempers, the Small-pox, Petechiae, and other epidemical acute Fevers; and yet more die on the ninth than the seventh Day; more on odd than even Days. Copious Evacuations by Sweat, thin and copious Urine, with a small, weak, quick Pulse, and a Delirium, prognosticate Death. We have observed, that the hotter, and of the more exquisite Sense, the Subject or Patient, the warmer the Climate, and the more violent the Disorder, the sooner the Disease comes to a Solution, and changes either for the better or the worse; but that a Crisis proceeds more slowly in languid and phlegmatic Subjects, in cold and marshy Countries, under a milder Distemper, and a full, gross, and common Diet. In such a State Relapses are also more frequent, and the Disease more easily passes, by *Metastasis*, into another of a different Kind.

It also deserves Consideration, that, as *Hippocrates*, *Lib.* 2. *Epid.* *Secl.* 20. well observes, in calm and settled Weather, and Years which happen agreeably to the Seasons, Diseases are of a mild Nature, and come to a very easy Crisis; but when the

Seasons are inconstant, Diseases partake of their Inconstancy, and have a difficult Solution. By this we are to understand, that when the Years keep up to their natural Constitution and Temperature, and no extraordinary or preternatural Weather happens, then are vegetable and animal Bodies in a right Disposition; and, if any Diseases arise in such Seasons, they keep to their ordinary Nature, Custom, and Genus; whence they are attended with none but the usual Symptoms, run out their legitimate Time, and come to a Solution on the usual critical Days. But, if the Seasons of the Year deviate from their natural Constitution, and assume a quite contrary and unnatural Face, so as to be transform'd one into another, the Summer to be like Autumn, the Winter warm, and partaking of the Nature of Summer, the Sky continuing for a long time covered with Mists and Clouds, and no Winds blowing, in such a Case the animal Fluids receive an irregular and preternatural Crisis and Temperature; whence arise Diseases of the worst Sort, attended with unusual Symptoms, and a very difficult Crisis, because they proceed not according to the ordinary Law and Course of Nature. And the Reason of this is obvious; for the Air, as *Hippocrates* has determin'd, is the principal Author and Ruler of whatever is done in our Bodies: This it is which, by its Elasticity, imparts not only Strength and Tone to the Solids, but Spirituousness, and an expansive Force, to the Fluids; whence it disposes and directs the Circulation of the Blood and Humours, and the Excretions from them, which are so necessary for the Preservation of the Body. Nor can it be doubted, but that, in hotter Countries, and a thinner Air, the Humours are more fluid and moveable, and Bodies more disposed to Perspiration: For which Reason Crises, and critical Solutions, of acute Diseases, are more observable in them than in more humid Countries, where the Air, destitute of Elasticity, is not limpid, but impregnated with Effluvia of a foreign Nature. Hence it comes to pass, that not only the Crisis is retarded, and rendered less sensible, but the ordinary Motions of Nature, which are bounded within certain Periods of Time, are much disturb'd; for which Cause some celebrated Writers doubt even the Existence of Crises in our Countries, or have ventured to pronounce them less exact than in Greece. Among these Authors is *Caspar Hoffman*, who, in his *Institut. Medicæ*, is of Opinion, that Crises are very rare among us. And *Baglivi*, *Prax. Med.* does not deny, but that, in Greece, where the Air is purer, the regular critical Motions take place more than in Italy. But, though careful and constant Observation proves, that there are Crises in our Country, yet we are to have a respect to the Difference in the Seasons of the Year, the Country, Diet, the Constitution of the Patient, and his Treatment by the Physician; for all these things, to a surprising Degree, circumscribe and modify the ordinary Motions of Nature in Diseases. *Galen*, therefore, *Lib. de Dieb. decret.* very well advises one who would know the Day of the Crisis, carefully to inform himself of the Age, Constitution, and Pulse of the Patient, and to consider the Country, and Season of the Year.

All prudent Physicians generally agree in this, that a Crisis may be anticipated, postpon'd, or diminish'd, by a preposterous Method of Cure, or an Error in Diet. Thus *Semertus*, *de Diebus criticis*, *Institut. Lib.* 3. *Part.* 3. *Cap.* 2. expressly says, "If the Patient should commit any remarkable Error, it is much to be feared, that the Crisis, which would have happened on a good critical Day, for Instance, the seventh, will fall out, by Anticipation, sooner, or, by Retardation, later, so as to happen on the sixth or eighth Day." And *Prosper Martianus*, *Com. in Lib. de Morb. Secl.* 2. speaks yet more plainly: "By the continual Use," says he, "of cooling Medicines, on account of the Fever, the Humours being incrassated, and the Corpuseles condensed, the spontaneous Evacuations are often prevented; so that this is none of the least Causes, why Crises so rarely happen in our Times; whereas, among the Antients, they were very common." The famous *Baglivi* is also very express to this Purpose, in *Prax. Med.* where he says, "The modern Practitioners in Medicine ought not to wonder, that Crises are not so frequent and perfect in our Days as they were formerly in Greece; for, either not knowing, or else condemning, the Greek Laws, they oppress, and almost kill, the Patient, by treating him, from the Beginning to the Decline of the Distemper, with Phlebotomies, and cathartic, diaphoretic, spirituous, and other Sorts of Medicines, imprudently and unseasonably exhibited. It is impossible, therefore, that Humours, thus disturbed by such opposite and disagreeing Medicines, should be disposed for the Work of a critical Despumation, at a stated Time; but, being perpetually agitated, and thrown into Confusion, instead of a perfect Crisis, must end in preternatural Metastases. And, for this Reason, we can neither observe the Rules of a Crisis, critical Days, nor other Motions of Nature, delivered by the Antients." To the same Purpose this Author, not without Experience, asserts, that, "Among the Peasants, who have no Assistance from a Physician, these Crises, or Despumations

of



“ of the peccant Matter, are accomplished by Sweat, a Flux, Urine, and other Ways of Nature, and by a Motion altogether regular.”

Now, since the Doctrine of *Crises*, and *critical* Days, is abundantly confirm'd and establish'd, not only on the Authority of the most celebrated Men in our Profession among the Moderns, but also by Experience, the undoubted Mistress of Truth, as we have proved at large above, it remains for us to inquire into the natural Causes of these wonderful Effects. *Galen, Lib. de Dieb. decret.* rightly acknowledges this Doctrine to be drawn from Experience, not from Reason: And, indeed, accurate Inquisition into the Causes of this wonderful Operation in Nature seems to surpass human Capacity. We shall, however, rejecting the Opinions of others, propose what to us seems most probable, and endeavour to explain and defend the same by proper Arguments. To begin with the Antients; they almost unanimously suppose Nature to be the efficient Cause of *Crises*, and *critical* Days; which same Nature they believed to be the Principle of all the Actions in the Body, and, being endued with a peculiar Knowledge of Acting, to make use of a certain or determinate Time, Order, Degree, Proportion, and Means, according to the Diversity of the morbid Cause, and to institute such Motions as are adapted to the Cause and Subject, in order to the Attainment of a certain End, which is the Preservation of the Body at a certain Time; and, moreover, to direct and regulate those Motions by certain Mediums or Organs. This Agent, which, with so much Prudence, moves and governs, and brings all the Motions, both in a sound and morbid State, to Perfection, by fit and proper Means, they suppose to be a real Being, free, incorporeal, and endued with the Knowledge of acting; but they judge its Essence to be incorporeal, chiefly from its Effect, which is Motion; for they suppose, that Motion, in itself, without Action upon the Body, or while it is in the Body, and acts upon the Body, cannot be said or understood to be any thing corporeal, but to be separated from the Essence of the Body, and never to exist necessarily with the Body; so that the Body may subsist without it, and, consequently, it has no essential Relation to Corporeity, as Quantity, Magnitude, and Figure have. Hence they conclude the Cause of this Motion to be something spiritual, especially considering the Order and Regularity of Motion in the Body; and, above all, that neither the material Alteration of the Humours, nor Changes of the Air, nor Diet, nor Medicine, can in the least alter or invert the settled Motions of Nature; but they judge of its spiritual Force principally, by considering, that a Perversion of the Order and Direction of these Motions can be accomplish'd by mere Imaginations and Fictions of the Mind. This Nature they believe to be also very observant of Time, that is, to perform its Actions in a certain and determinate Time: Such are those of forming, perfecting, curing, preserving the Man, correcting the Causes of Diseases, or expelling them through proper Emunctories adapted to the peccant Matter; as, for Instance, viscid and bilious Humours, through the Intestines; the thin and acrimonious, through the external Habit of the Body; salt and serous Superfluities, through the Kidneys; the Redundance of the Blood, through the Mouths of the Vessels; and an acrimonious volatile Bile, by Vomit. Then they affirm, that this Nature, for the Accomplishment of its most remarkable and stated Effects, has selected the septenary Number of Days, Months, and Years. And this was the most common Opinion of the Antients; from which we can only infer, that these admirable and orderly Effects have a like Cause from whence they proceed; but, we may still justly ask, What is this Cause? What is its Nature? Is it endued with Understanding, and a Knowledge of Things? Or are these Effects the Result of a necessary and physical Order and Contrivance of Causes, acting without all manner of Knowledge or Consciousness?

There is no Doubt, but that an Order, where-ever it is observed, always supposes an antecedent Cause, which is the Author of that Order; for Example, the Artist is the Cause of a Clock: But still it remains a Difficulty, whether these orderly or regular Effects are immediately to be derived from the Order or Mechanism established in Nature, or from the first Cause or Author of this Order, which Cause is endued with Knowledge and Perception. For Example; in a Clock, that the Index shews exactly the Hour, is not owing immediately to the Artist, but to the Order and Contrivance established by him in this Instrument, which is the proximate and immediate Cause of such an Effect; and we may very well apply this Instance to our Body, in which we perceive the most orderly and regular Effects in Nutrition, Augmentation, Perfection, Excretions, Motion of the Blood, and Cure of Diseases. These Things consider'd, we may justly ask the Question, Whether these Effects proceed immediately from God, the first and most perfect Author of Order, or from the Soul, as a subaltern Cause, or rather from the Order, Structure, and Mechanism, of the Body. For our part, we are of Opinion, as to physical and medicinal Affairs, that if Effects

can be demonstrated proximately from corporeal mechanic Causes, which are perceptible by the Senses, there is no Occasion to have recourse to remote or obscure Causes, with which we are altogether unacquainted; as Spirit, Soul, Sympathy, Antipathy, Terror, Rage, or to moral Intentions and Direction. Our Sentiments, besides, are, that, though all Effects which happen in Nature, cannot very clearly be demonstrated *a priori* to the Senses and Capacities of Men, because of the narrow Limits of the human Understanding, it does by no means follow, that they have their Origin, not from a mechanic, but spiritual Cause; and this we would the more earnestly press and insist upon, that the Physician and Naturalist might be induced always to search out the proximate and physical Causes, without having recourse to such as are spiritual, metaphysical, unknown, and quite useless.

None of sound Judgment can deny, but that in our Body, which is a most artificial Structure, there inhabits a Principle whose Nature and Operation are quite distinct from Motion and Body. Of this Kind are Perception, Cogitation, Direction of Motions, and the Will, which can subsist without the Body, and have no Agreement with it. But, we utterly deny, that Motion, or rather the Principle from which Motion, whether it be local or intestine in Bodies, proceeds, and on which it depends, has no manner of Relation to the Essence of Body: For a Body without Operation, and the Principle of Operation, cannot be conceived; since a Creature merely passive, which is not furnish'd with a Principle of acting, is not a real physical Being, but a Creature of the Imagination. A Body, therefore, never subsists or exists, nor can be conceived, without an innate internal Principle of Motion, which is the Cause of the motive Forces and Powers, which it exerts upon other Bodies. Then, where-ever there is Body, or an extended Substance, there is Motion, Tendency, Pressure, and Action, of one Body upon another; and where there is a Machine, or organiz'd Body, there Motion is appointed for some certain End. Our Body is a very artificial Machine, which, from the convenient and agreeable Disposition of the fluid and solid Parts exercised on one another, produces Actions, as it sufficiently appears from the Preservation of the Body by Digestions, Mixtures, and Excretions, intestine progressive Motion, and Nutrition. Now these Motions are not immediately perform'd by the Soul in the motive Fibres; but the Soul only perceives certain Species of Motion in the Organs, understands, distinguishes, and compares them, and governs those Motions in Parts subjected to the Will. And nothing more deserves our Observation, than that great Intercourse which God has establish'd in Man between the Soul, and the Motions of the Body; for though the Soul does not indeed immediately perform Motions in the Body, it has a Power of modifying and disturbing them. Of this we have a clear Proof from the Passions of the Mind, and the Imaginations of pregnant Women, which are very well known to have a surprising Effect upon the Motion of the Blood and Humours. On the other hand, the Motion of the Fluids has a strange Influence in disposing the Operations of the Soul, I mean the Manners and Passions; as may very clearly be demonstrated from the different Nature of Temperaments, Ages, Nations, and Diet. We cannot doubt, then, but that Motions in the Body are quite distinct from the Actions of the Soul; and that the Blood and Fluids are not passive in the Case, so as to be directed by the Soul, but rather these Fluids exert their Action on the Soul: And, in short, what can be more evident, than that Diseases are caused, and Health restored, and Life preserved or destroy'd, by Air, Drink, and Diet? What can be more certain, than that the Structure of the solid Parts, which differs with respect to Ages, Temperaments, and hereditary Disposition, disposes to particular Diseases? And yet all these Things have no Regard to, or Communion with, the Soul, which therefore must of necessity be passive.

That a just Time is observed in some Actions, and those of the principal or more solemn Kind, is one of the best Proofs of the Presence and Necessity of a Mechanism; for an exquisite and accurate Order is visible in Actions, of which Mechanism is the Foundation. We see this in the Macrocosm, by the remarkable Phenomena of the Tides, the stated Winds and Rains in some Places, the Revolutions of Times and Seasons, with the Budding, Blossoming, and Fruetification of Plants, which all come to pass in a certain Time, and require a limited Season. The most wise Architect of the Universe has been pleas'd to make Choice of the septenary Number for the Production of many solemn and surprising Effects, especially in our Microcosm.

The venerable Sages of Antiquity dignify'd this Number with the Epithets of *perfect*, *full*, *bold*, *masculine*, for the great Effects accomplished in it, which are a sufficient Evidence of the infinite Wisdom of the Creator display'd in our microcosmical Nature. We must not, however, think there is so much Power inherent in this Number, as some of the Antients imagin'd; but we are to form our Notions of the Matter by what follows. In order to the Production of certain Effects in corporeal



corporeal Things, there is required a certain and specific Proportion of the agent Cause or Actions: Now all physical Actions are nothing but Motion; and therefore a certain Proportion, a certain Number of Motions, is necessary to a certain Effect; for the Measure and Number of Motions constitute Time, and Time is nothing but a certain Number of Motions: Hence *certain* Actions require a *certain* Time. Let us accommodate this to our present Purpose by the following Instance: Under an Inflammation, for the Dissolution and Absterion of a *certain* Proportion of Blood stagnating in the Vessels, there is requir'd a *certain* Force and Number of Motions, by which the Blood, being impelled from the Heart and Arteries, to the affected Part, may free it from the Obstruction. But God has form'd our Machine in such a manner, that seven Days, and the Circulations of Blood, during that Period, are to be spent in performing that Operation: Hence acute and inflammatory Fevers are commonly resolv'd on the seventh Day. Again, From the many uneasy Irritations excited in the nervous and membranous System, it is over-and-above evident, that the Matter of the Small-pox, Measles, Petechiæ, and Purpura, is of an acrimonious and caustic Quality: Now, that this Matter may be removed by a Mixture of other Parts from the Blood, and disposed for Secretion by the Habit of the Body, a *certain* Time is required, which takes up the Space of three or four Days; at the End of which, the peccant Matter leaves the internal Parts, and takes its Course to the Superficies. The Poison in the Plague, and contagious Fevers, is a Matter of a highly penetrating and putrefying Nature, which, mix'd with the Blood, either introduces a like putridous Motion, and so fatally destroys the corporeal Texture; or else is itself corrected and eliminated out of the Body; in order to which Effect, there is required a just Time, and sufficient Motion, for the Correction and Evacuation of the pestiferous Matter. Thus again, When a Fever proceeds from the Putrefaction of some Humour stagnating in the Viscera, there is a certain or determinate Motion of the Blood necessary to cleanse and absterge the putrid Collection; which Effect is to be accomplished by a certain Number of Pulsations of the Heart and Arteries, even just as many as pass from the Beginning to the seventh or eleventh Day. Several Sorts of burning Fevers take their Rise from a caustic acrimonious Bile; for the tempering and correcting, or, as the Antients express'd themselves, for the concocting and maturing of which, the same Time is required. "God, as *Pliny, Hist. Nat.* says, has appointed this Law for Diseases, "that they should be terminated by a quaternary or septenary "Number."

That the Solution of a Disease, at a stated Time, proceeds not from a Soul, or from Nature, as an intelligent incorporeal Principle, but from Mechanism, may be inferr'd, from only considering, that such *Crises* are anticipated or postponed, and become irregular, if the Patient errs in Point of Diet; if the Disease be treated with wrong Medicines; or the Cause thereof is something strange and unusual: On which account, *Crises* vary also according to the Diversity of Years, Seasons, Countries, and Subjects. *Riverius, in Institut.* writes, that Motion and Disposition are the Cause, why *Crises* happen sometimes sooner, sometimes later, and sometimes upon intercalary Days, according to the Celerity of Concoction of the mild, or malignant, Humours: Wherefore, if the Cause of the Disease be not too malignant, and the ordinary Motions not much disturbed or perverted with improper Diet or Medicines, if there be a free Perspiration, and the Body not very impure, and if the Air be pure, serene, and elastic, the *Crises* happen in just Time and Order.

Here arises a Question of some Importance, Why full and perfect *Crises* happen principally on critical Days; and good *Crises* are attended with a Remission of the Symptoms, and with Evacuations; for, as *Galen* has it, there is no good *Crises* without some remarkable preceding Evacuation. To explain this, it is said, that Nature, which is very observant of the septenary Number, rises up at first, with all her Forces, against the Cause of the Disease, which she endeavours to mollify and dispel; for the Preservation and Continuance of our Bodies are principally maintained by excretory Actions, which prevent Putrefaction and Death. To this we answer, that the Soul is, indeed, endu'd with Knowledge; but not Nature, which cures Diseases, and which, being conscious of nothing, acts out of mere Necessity; for which Reason, it neither understands the Cause of a Disease, nor fights or struggles, or kindles up a Fever, on that account; but all these Things, in my Opinion, depend on pure mechanical Principles, since external Causes alone, for Example, Baths, which obstruct the Pores, or heterogeneous Liquors infused into the Veins, may, by distending and pricking the Membranes, excite febrile Spasms. Further, It cannot be deny'd, that Life, as it signifies an Integrity of the Structure or Composition, is preserved by Excretion; but, as Life rather imports an Act, that is, a circular Motion of the Blood and Fluids, which is also the nearest Tie between Body and Soul, and not an Integrity of the Compound, and is, moreover, the Spring of all the Actions in the

Bodies of Animals, and of those very Excretions which preserve the Integrity of the Structure, it evidently appears, that Excretions are not to be regarded as the only Causes of the Preservation of Life; and that Diseases do not arise only from a Suppression of Excretions, nor are cured only by their Restoration. For nothing can be more evident, than that Life can be taken away by an Effusion of Blood, by a Polypus, Ligatures, Coagulations, stopping the Circulation of the Blood, or a Disturbance of the Motions by means of Poisons, the Texture and Composition of the Parts remaining inviolated. Hence we may conclude, that all Causes which produce a Disease, are not of such a Nature as to indicate only a Putrefaction, and to require, or even admit, an Excretion; since it frequently happens, that a small Portion of Matter, of a very deleterious Quality, which indicates Correction and Preparation, in order to Excretion, proves the most dangerous and secret Enemy to Life; besides, the peccant Matter often requires Resolution, rather than Expulsion.

In compliance with this Sentiment, we might charge Nature with Error and Imprudence, for exciting such violent Motions in Fevers, for the sake of Resolution and Excretion; when, it is well known, that the Affair of Excretion, as well as Secretion, would succeed at least as happily under a more moderate Motion of the Fluids. For these Reasons, we are of Opinion, that those Excretions, which happen on critical Days, are to be esteem'd a Sign, and not a Cause, of the Solution of the Disease: For hence it appears, that Nature being compos'd to Rest, and the irregular and spastic Motions of the Fibres ceasing, there commences a quicker Secretion, and a freer Appulse of those Impurities of the Blood and Humours, which were generated under the Disease, to the Emunctories of the Body. For if the most copious Excretions happen on the critical Days, or any other, without Relief, and an Augmentation of the Strength, they are of no Efficacy; so that sometimes Death comes with large Excretions, which is a manifest Proof, that the Disease is not resolv'd by Excretions: Wherefore all Evacuations, which happen not in and with a Decrease of the Disease, are call'd *symptomatical*; but those which proceed from an Increase of the Strength, and argue a Vigour in Nature, are termed *critical*.

Copious Excretions by Urine, as well as thin watery Urine, and profuse Sweats, without an Alleviation of the Symptoms, are never safe, according to the Authority and Experience both of Antients and Moderns; for they indicate the Matter of the Disease to be unsubdu'd, and that the Mixture of the Blood, and its Union with the Serum, is destroy'd; whence the fluid and aqueous Parts are separated from the thicker: Wherefore copious and thin Urine, as *Hippocrates* long ago observed, portend a Delirium; for the Blood being render'd thicker by a Subtraction of the Serum, and being under a more languid Impulse of the Arteries, easily stagnates in the Vessels of the Meninges, and produces a Phrensy. Whenever there happens an Abscession and Eruption, as of the Small-pox, Measles, or Petechiæ, before the ordinary Time, it is an ill Sign; because it indicates a copious Matter, and the same not well temper'd and corrected.

From the Premises it appears, that Excretions, on critical Days, are not the Causes of the Solution of a Disease, but rather the Consequences of an Advantage obtain'd over the morbid Cause. Of this we have a manifest Example in the Paroxysms of intermittent Fevers, where Sweats yield no Relief; but, when they happen in the Decline of the Disease, they are of Service; not because they evacuate the formal Matter of the Fever, but because they assure us of the Cessation of the irregular Motions, and febrile Spasms: However, much excrementitious Sordes, generated in the Disease, is eliminated with them. It is observable, also, that under severe Pains no Sweat appears; but as soon as it flows in a free Manner, it passes for a Sign of the Removal of the Pain, a Relaxation of the Tenseness of the Fibres, and a freer Circulation of the Blood.

We may conclude from the preceding Discourse, that the Observation of *Crises*, and *critical* Days, has its Foundation in Nature, and is of Use in Practice; for as nothing is made and produced without Time, but every Effect requires a certain Time, so is there also a certain Time necessary for the Correction of the morbid Cause, and the Preparation of it in order to an Evacuation. And as a determinate Time is requir'd for the Generation of a morbid Cause, so also is the Correction and Expulsion of it out of the Body perform'd in a certain Space of Time. Now these Alterations, Corrections, and Immutations of the morbid Matter, happen on the seventh, semi-seventh, eleventh, or fourteenth Day, according to the ordinary Course of Nature. The Physician, therefore, (1.) who acts against this Order, or uses violent Means in attempting to subdue the Disease, before the Time appointed by Nature for subduing the morbid Matter, acts rashly and preposterously, and commits an Error. (2.) When the Matter is to be temper'd and concocted, and the Physician attempts Expulsion, and for that End uses Volatiles, Sudorifics, and Venesection,



Venesection, he offends against the Law of Nature, and greatly injures the Patient; for the Law of Nature is a Law to the Physician. (3.) On critical Days, and about that time, it is best to abstain from strong Evacuants, for fear of deriving the Humours, which ought to be excreted by proper Emunctories, into inconvenient and improper Places. (4.) If Nature be weak in Expulsion, we are prudently to assist it; for Evacuations owing to Strength of Nature, and a Conquest over the Disease, are beneficial, by freeing the Body from many noxious excrementitious Parts, generated in the time of the Fever, as well in the Vessels, as in the intestinal Tube; otherwise Evacuations, not well succeeding, easily induce a Relapse. (5.) Evacuants and Purges, according to *Hippocrates*, *Seet. 2. Aph. 25.* are proper to be used in the Beginning of a Fever, when the Matter is redundant, that is, if the Blood be copious, and the Vessels and *Primæ Viæ* obstructed with impure Sordes; such Depletions potently assist Nature, and remove what hinders the Cure, and foment the Disease. (6.) If, thro' the Malignancy of the Matter, the irregular Motions of Nature seem to have a Tendency towards a dangerous Metastasis, the prudent Physician, without any regard to Time, will make it his Care to resolve the Blood, to derive it to other Places, and to prevent its Stagnation, by seasonable Relaxation, Phlebotomy, a Diaphoresis, external Discutients, and sometimes by Section under the Tongue, or Scarification of the Nostrils. In such a Situation, when the Signs prognosticate certain Death, it would be Madness to expect a Crisis; and, therefore, we have often known gentle Cathartics, and nitro-saline Substances, mixed with *Aurum fulminans*, and discreetly exhibited, successful in such Cases beyond Expectation. *F. Hoffman.*

**CRISPATURA.** Crispature, Curling. In Medicine it implies a spasmodic Contraction of the Membranes and Fibres. *Castellus.*

**CRISPINUS, or CRESPINUS.** A Name for the Barberry-tree. *Blancard.*

**CRISTA.** A Crest. In Anatomy, a Process of the Os Ethmoides is call'd *CRISTA GALLI*, from its supposed Resemblance to the Comb of a Cock. See *CAPUT*. In Surgery, certain Excrescences, about the Anus and Pudenda, are called *Cristæ*, on account of their Form. See *ANUS*. In Botany, *Crista Galli* is the *ALECTOROLOPHUS*, which see; and the *Crista Pavonis* is the *POINCIANA*; *flore pulcherrimo*, which see.

**CRITHAMUM.** The same as *CRITHMUM*. *Blancard.*

**CRITHE, κριθή.** Barley; a Grain much recommended by *Hippocrates*, and most Physicians since his Days, in acute Distempers. Hence, from its Similitude, a sort of Tubercle on the Eyelids is call'd *Crithe*. See *CHALAZA*.

**CRITHMUM.** The Name of a Plant.

The Characters are,

The Root is fibrous, and spreading; the Leaves are succulent, thick, narrow, trifid, divided, and subdivided; the Seed is flat, a little striated, and parts from its Covering.

*Boerhaave* takes notice of two Sorts of the *Crithmum*.

1. *Crithmum*; five *fœniculum maritimum minus*. *C. B. Pin. 288. Mor. Umb. 20. Boerb. Ind. A. 57. Tourn. Inst. 317. Crithmum Fœniculum maritimum, Herba S. Petri, Offic. Crithmum maritimum, Ger. 427. Emac. 533. Raii Hist. 1. 457. Synop. 3. 217. Mer. Pin. 31. Crithmum maritimum vulgare, Park. Theat. 1286. Crithmum sive Fœniculum maritimum, Merc. Bot. 1. 31. Phyt. Brit. 32. Crithmum multis sive Fœniculum maritimum, J. B. 3. 194. Hist. Oxon. 3. 289. Crithmum sive Crithmum, Chab. 408. SAMPHIRE.*

The *Sea-fennel*, or *Samphire*, is a much lower Plant than the common *Fennel*, having broader, shorter, thicker Leaves than that, of a dull-green Colour; the Stalk grows scarce a Foot high, having the like Leaves on it; and on the Top it bears Umbels of small yellowish Flowers, and, after them, roundish Seeds, somewhat like ordinary *Fennel*, but bigger. The Root is thick and long, continuing several Years. The whole Plant has a warm aromatic Smell and Taste. It grows upon Rocks by the Sea-side in many Places of *England*.

*Samphire* is more made use of as a Pickle, being a very agreeable one, than for any Medicinal Purposes. However, it is strengthening to the Stomach, procures an Appetite, provokes Urine, and opens Obstructions of the Bowels, and is good for the Jaundice. *Miller's Bot. Off.*

It is further recommended as a Dissolvent of the Stone, and a Promoter of the Menfes.

*Hippocrates* directs the Bark of *Samphire* (κριθμόν) in Wine, fasting, together with the Grains of Piony, and Seeds of Elder, in a Droply of the Uterus; and, in Pains of the same Part, he orders Roots and Seeds of this Plant to be taken internally.

2. *Crithmum*; five *Fœniculum maritimum*; majus; odore Apri. *C. B. P. 288. M. U. 3. 290. Baticulæ alterum genus, ex Sicilia. Catalp. t. R. P. Boerb. Ind. alt. Plant. Vol. 1.*

**CRITICUS.** Critical.

**CROCE, κρόκον.** In *Hippocrates* it signifies a Thread.

**CROCEIDE CONFECTIO.** The Name of a Confection

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recommended by *Nicolaus Myrepsus* for the Colic. *Seet. 31. Cap. 22.*

**CROCINUM, κρόκινον.** Oil of Saffron is thus described, by *Dioscorides*.

The same Weight and Quantity of Oil are to be taken as in the Composition of the *SUSINUM*, (see this under *ALCYONATION*) and also inspissated. Into three Pounds and an half of the Oil, thus inspissated as for the *SUSINUM*, put eight Drams of Saffron, and stir them several times in a Day for five Days together. The sixth Day cleanse the Oil well from the Saffron, and pour a like Quantity of Oil upon the same Saffron, and stir them for three Days. Then cleanse off the Oil, and put therein of Myrrh, pounded, and sifted, forty Ounces; stir them well together in a Mortar, and afterwards set the same aside for Use.

Some use an Oil impregnated with Aromatics in the Composition of the *CROCINUM*, as they do of the *CYPRINUM*. The best *CROCINUM*, and the fittest for Medicinal Purposes, is what smells very strong of the Saffron, and the next in Goodness is what is well scented with the Myrrh.

The *Crocium* is of a heating Quality, and procures Sleep; whence it is frequently advised in Phrenies, by way of Embrocation, or held to the Nose, or the Nostrils are rub'd with the same; it is also a Suppurative, and deterges Ulcers. It is essential in Hardnesses, Obstructions, and malignant Ulcers of the Uterus, used with Wax, Saffron, Marrow, and double its Quantity of Oil; for it concocts, mollifies, moistens, and is also a Lenitive. It is good against a Glaucoma, if it be mixed with Water, and the Eyes anointed with it. *Dioscorides, Lib. 1. Cap. 64.*

**CROCUS.** The Name of a Plant; the Characters of which are, according to *Miller*,

It hath a Flower consisting of one Leaf, which is shaped like a Lily, fistulous underneath; the Tube widening into six Segments, and resting on the Foot-stalk: The Pointal rises out of the Bottom of the Flower, and is divided into three headed and crested Capillaments; but the Empalement afterwards turns to an oblong triangular Fruit, divided into three Cells, and is full of roundish Seeds. To these Marks must be added, it hath a tuberous Root, and long grassy Leaves, with a longitudinal white Furrow thro' the Middle of each.

There are a great Number of Species of the *Crocus*. *Boerhaave* mentions twenty-eight. But that which is principally used in Medicine is, the

*Crocus*; sativus. *C. B. Pin. 65. Tourn. Inst. 353. Eleme Bot. 289. Boerb. Ind. A. 2. 120. Rupp. Flor. Jen. 26. Mer. Pin. 31. CROCUS, Offic. Ger. 123. Emac. 151. Raii Hist. 2. 1176. Synop. 3. 374. J. B. 2. 637. Crocus vel Crocum, Chab. 222. Pin. 31. Crocus genuinus sive sativus, Merc. Bot. 2. 19. Phyt. Brit. 33. Crocus Autumnalis sativus, Hist. Oxon. 2. 335. SAFFRON.*

The Plant, which produces the true *Saffron*, has a round bulbous Root, about as big as a Nutmeg, flatted at Bottom, from which spring several white Fibres: It is covered outwardly with a yellowish-brown Skin, but is white on the Inside. From this Root arise the Flowers, inclosed in a thin Skin or Husk, being naked, and without Stalks, made up of six long, but roundish-pointed, purple Leaves, inclosing in their Middle three Stamina, of a fiery, yellow, red Colour, which being gather'd, and carefully dry'd in a Saffron-kiln, and made into square Cakes, is the *Saffron* of the Shops.

The *Saffron-flowers* blow in September, but the Leaves come not forth till the Spring; being narrow and grass-like, with a white Furrow running thro' the whole Length.

The best *Saffron* in the World grows in *England*, being cultivated in *Essex*, *Suffolk*, and *Cambridgeshire*.

*Saffron* is a most noble Cordial, and a Strengtheners of the Heart and vital Spirits, resists Putrefaction, and is good in all kinds of malignant and contagious Distempers, in Fevers, Small-pox, and Measles. It opens Obstructions of the Liver and Spleen, helps the Jaundice, brings down the Catamenia, expedites the Birth, and expels the Secundines. It is good in Diseases of the Lungs, as Asthma and Difficulty of Breathing, and of great Service in consumptive Weakness. Outwardly applied in Poultices, it eases Pains, and ripens Impostumations.

Officinal Preparations of *Saffron* are, the Tincture, the Spirit, the Syrup, the Extract, and the Plaster *Oxycroceum*. *Miller's Bot. Off.*

The dry'd Filaments of the Flower, which are more peculiarly call'd *Crocus*, or *Crocum*, κρόκος, κρόκον, by the *Arabians* *Zoffaran*, or rather *Zahafaran*, whence the *English Saffron*, are slender Substances, thinner in the lower Part, and broader in the upper, of a whitish or palish Yellow, finely crenated, of a peculiar, pleasant, and aromatic Smell, of subtle Parts, and diffusing its Odour to a great Distance, somewhat stimulating to the Eyes, and moderately stuffing the Head, and inclining



to Sleep, of a bitterish Taste, and sufficient, in a small Portion, to turn a large Quantity of Wine or Water of a yellow or Lemon-colour, inclining to Red. Crocus is by the Chymists, from its Golden Colour, call'd *Aroma Philosophorum*, by Contraction *Aroph*; by others *Sanguis Herculis*, and *Aurum vegetabile*: For its extraordinary Virtues against many Diseases, it is honoured with the Title of *Rex-vegetabilium*, and *Panacea vegetabilis*.

*Saffron*, by a Chymical Analysis, according to *Geoffroy's* Account, yields an acrimonious, thin, and highly volatile Spirit, which comes off first, tho' in small Quantity, in the Distillation; to this succeeds an acidish Phlegm, which will turn a Tincture of Heliotropium of a red Colour; then a very little Oil, and a very small Quantity of urinous Salt. Something of a fixed alkaline Salt is extracted from the Caput Mortuum by Lixivation. The acid Salt is not so deeply involved in the Sulphur, but that it communicates an intensely red Colour to a Solution of Heliotropium. Oil of Tartar, poured on a Solution of Saffron, produces no Alteration; but Lime-water, with a very slight Effervescence, and a thin Coagulum, assumes a white Colour, on account of the Acid concealed in the Saffron, tho' no Heat can be perceived. The Tincture of Saffron may be extracted either with Water, or Spirit of Wine. *Antonius de Heide*, in his *Observ. Medic.* informs us, that a few Drops of this Tincture, poured upon clean Paper, underwent no Change, as to their Colour and Consistence, by an Addition of Aqua-fortis, Pot-ash dissolved, and a Solution of sublimed Mercury, made with Rain-water. *Newman* denies, that the essential Oil, the fixed Sulphur, and the volatile Salt of Saffron, can be obtained separately; and affirms, that it is a mixed, aqueous, gummy, and terrestrial Substance, in which, tho' there are rarefied oleous Parts, mixed with resinous and highly subtle saline Particles, yet these cannot be separated from each other; for from two Ounces and an half of Saffron, dried by a Bath-heat, he obtained by Distillation half an Ounce of a fragrant Liquor, or the Quintessence of Saffron, in which there was no substantial Oil. The Part remaining after Distillation, which weighed two Ounces, he divided into two equal Parts for making Extracts. From an Ounce, therefore, of this Saffron he obtained of the first spirituous Extract five Drams and one Scruple, and of the second aqueous Extract one Dram and half a Scruple, and of the terrestrial Part one Dram and an half. With the other Ounce of Saffron he first used Water, and obtained of the first aqueous Extract six Drams, and of the second spirituous Extract one Scruple, whilst the Saffron remaining weighed five Scruples. Hence 'tis obvious, that, in Saffron, the Quantity of gummy Parts surpasses that of the resinous. But if we may believe the Author of the Annotations on this Passage of *Newman*, the essential Oil of Saffron may be obtain'd by Distillation, entirely separate from the other Parts. According to him, a Dram and an half of this Oil may be obtain'd from one Pound of Saffron, which is of so penetrating a Taste, that one Drop of it, taken upon the Tongue, will be felt for twenty or thirty Hours after. It may be obtained by any one from the Extract of Saffron made with Water, provided half a Pound of the Saffron is used for that Purpose. According to *Schroder*, a Pound of Saffron yields a Dram of this Oil. But since Saffron is dissolved in Water, as well as in Spirit of Wine, and since separately with each of these Fluids, when reduced to a thicker Consistence, by means of Abstraction, it resembles a pinguious balsamic Oil, capable of being mixed with Water, Oil, and Spirit of Wine, *Cartheuser* from this concludes, that there is a fixed Principle, of a very peculiar Nature, lodged in it, since it neither resembles a perfect Oil and Gum, nor a perfect Resin, but is of a kind of neutral Nature, and seems, in some measure, to resemble both. *Boerhaave*, in the second Vol. of his *Chymistry*, calls it an heteroclitic Body, which scarce resembles any other in Nature. As for the Virtues of Saffron, resulting from its constituent Parts, *Ettmuller*, from its volatile Oil, in Conjunction with its acrid, highly spirituous, and penetrating Salt, derives its intoxicating, and at last narcotic Quality. He affirms, that both these Principles, the Oil and the Salt, are so closely combined and united in the concrete Body, that it yields but very little Oil without contracting an Empyreuma. He also maintains, that the acrid Salt contains a certain aromatic Quality, by which it stimulates the Uterus. The celebrated *Hoffman*, in his *Dissertatio de Remediorum domesticorum Utilitate*, informs us, that Saffron, in consequence of its mild, anodyne, and vaporous Sulphur, is excellently calculated for alleviating Pains and Spasms; and that, by means of its acrid and volatile Salt, it contributes to open and remove Obstructions. *Newman* deduces the narcotic Virtue of Saffron from its highly attenuated, rarefy'd, and vaporous oleous Parts.

Without enumerating the several Uses to which the Ancients applied Saffron, whether as an Ingredient in Aliments, or an Instrument of Luxury, we shall proceed to the modern Accounts of it. We shall but just mention, that it serves the Dyers to give a yellow Colour, and the Painters in their Water-colours; and that it is boiled with Alum in Water, to make a yellow Ink;

and that the *Indians*, on their Holidays, express their Joy by scattering or throwing about Saffron, as we read in *Orington's Voyages*; and that it is accounted in many Countries the best Seasoning for Food: This I know to be Matter of Fact, with regard to the Inhabitants of *Poland* and *Courland*; and, as for the *Spaniards* and *Italians*, we are assured by *Labat*, in the Account of his Travels into *Spain* and *Italy*, that they are persuaded, that without the Use of Saffron they should be perpetually molested with Disorders of the Breast, Lipothymies, and want of Sleep. The Women in *Ireland*, as *Laurembergius* says, dye their Shifts with Saffron, to preserve them from Vermin, and to procure to themselves Strength of Body, and Cheerfulness of Mind. In that Country the young Men also chew it in their Mouths; by which means they acquire a fragrant Breath, and by breathing upon the Face of a Woman, which they suspect to be painted, immediately make her become pale, and betray her counterfeited Beauty. *Scaliger*, in his *Exercitationes*, informs us, that, in *Ireland* and *Iceland*, there are a Set of clownish People, who wear Shirts tinged with Saffron, for six Weeks and more, with an Intention to banish Lice. *Bacon*, in his *History of Life and Death*, informs us, that, in *Iceland*, Linen and Shirts, tinged with Saffron, were originally intended for preventing Putrefaction; but he thinks, that this Piece of Practice contributes to the Prolongation of Life; and, in the same Work, he expressly affirms, that the *English* are rendered sprightly by a liberal Use of Saffron in Sweetmeats and Broths. And the same *Bacon*, in his Treatise *De retardandis Senectutis Accidentibus*, advises Saffron to be mixed with Medicines intended to prevent the Effects of old Age; for, says he, Saffron conveys Medicines to the Heart, cures its Palpitation, removes Melancholy and Uneasiness, revives the Brain, renders the Mind cheerful, and generates Boldness. Saffron seems to produce its Effects on the human Body, by the uncommon Fineness and Subtlety of its Parts; and, according to *Caspar Hoffman*, it is justly doubted, whether it does not surpass all other Simples. Hence it is, as *Lifter* observes, that it greatly contributes to promote the Concoctions, especially the third. *Boerhaave*, in the second Vol. of his *Chymistry*, calls it a true and genuine Rouser of the animal Spirits, because it is possessed of aromatic, stimulating, and heating Qualities; and is therefore discutient, resolvent, aperient, and corroborating. It is classed not only among the cordial, alexipharmic, sudorific, diuretic, cephalic, pectoral, emmenagogue, and ecbotic, but also among the anodyne and narcotic Medicines. In malignant and contagious Fevers, *Friccius*, from his own Experience, recommends the following Medicine:

Take of Rose-water, beat with the White of a new-laid Egg, two Spoonfuls; of Saffron, one Pugil. When these are sufficiently mixed, add two Spoonfuls of the Spirit of Wine, and about the Bulk of a small Nutmeg of Camphire reduced to Powder. Let it be exhibited Morning and Evening.

*Diemerbroeck*, in his Treatise *de Peste*, informs us, that in a particular Plague he rarely used Saffron; and that he could not be sensible of its Efficacy and Virtue against this contagious Malignity, when he did use it. Besides, continues he, 'tis not safe to make Trial of its Qualities in a Plague, because it affects the Head; and, when exhibited in large Quantities, induces a Drowsiness or Delirium, both which are greatly to be dreaded, and consequently carefully prevented in Plagues. It is successfully used for freeing the Lungs from thick and viscid Phlegm; for which Reason it is by some call'd *Anima Pulmonum*, the Soul of the Lungs. *Camerarius*, in his *Florus Medicus*, affirms, that it is so beneficial in Disorders of the Thorax, that some exhibit a Scruple and an half of it, with half a Grain of Musk, to be drank in warm Wine for curing Asthmas. He also affirms, that it greatly contributes to remove the Effects of a Perspiration obstructed by Cold. *Paulus de Sorbait*, in his *Universa Medicina*, informs us, that if we want to protract the Life of a phthisical Patient for a short time, we must exhibit to him half a Scruple of Saffron. *Friccius*, in Coughs, especially those of Children, recommends the following Preparation as a Specific:

Take of fresh Sperma Ceti, half a Scruple, and of Saffron, one Grain, if the Child is a Year old: But, if the Child is two or three Years old, Take of fresh Sperma Ceti, one Scruple; and of Saffron, two Grains; and to Children farther advanced, half a Dram of Sperma Ceti, and three Grains of Saffron, may be exhibited in warm Broth.

Saffron is by many recommended in removing Obstructions of the Liver, and curing the Jaundice. *Hertadt* in his *Groecologia*, recommends the following Preparation as a Specific in the Jaundice.

Take



Take of Malmsey-wine, one Pint; the Yolks of two Eggs; one Dram of Saffron: Mix all together. One Half of this Preparation is to be taken at Night, when going to Bed, and the other Half in the Morning.

In the Cure of a Dysentery Saffron acquired an uncommon Reputation, after *Bontius* affirm'd, that no more efficacious Remedy could be found; and that the Extract of Saffron was the most genuine Antidote in this Disorder, tho' of the most virulent and obstinate Kind. This Extract he orders to be prepared in the following Manner:

Take of the best Opium, Dragons-blood, Gum Benzoin, and *Persian* Saffron, each equal Parts; and of black or Japan Amber, a third Part: Mix them all together in an oblong Vessel with a narrow Neck. Pour a Quantity of strong Wine Vinegar upon them, sufficient to rise three or four Inches above the Materials. After Digestion in a strong Heat, let the Liquor, strongly expressed, be inspissated to the Consistence of an Extract. The Dose of this Medicine is from six to nine Grains, in the Form of a Pill, or dissolved in a Spoonful of Wine, or any other proper Liquor. It is principally to be exhibited towards Night.

*Baubine*, from *Matthiolus*, informs us, that Children, which continually cry, are very weak, and discharge small fabulous Concretions in their Urine, are greatly relieved by a little Saffron exhibited with Milk. *Helmolt*, against the Stone, greatly recommends the *Aroph* of *Paracelsus*, which, according to *Hoffman* in his *Clavis Schrod.* is prepared by putting Saffron and Bread, dipt in Wine, in a Vessel, and burying them for some Days in Horse-dung, and then distilling. According to *Boerhaave*, there is no Necessity for a previous Corruption of the Saffron and Bread in Horse-dung, for extracting this Tincture, since, by that means, it is rather rendered worse than better. But the Cases, related by Physicians, of Children ting'd in their Mothers Bellies, sufficiently prove, that Saffron has a peculiar Influence on the Uterus, and that its emmenagogue and ecobolic Virtues are to be derived from this Circumstance. 'Tis also certain from Experience, that Saffron, when taken internally, tinges not only the Excrements, but the Urine. But, in *Eph. Nat. Curios. Decad. 3. a. 6. o. 273.* we have an Account of a young Man of twenty-two Years of Age, whose Seed was ting'd of a Saffron-colour by his eating Aliments prepared with Saffron. *Riverius* affirms, that half a Scruple of Saffron, exhibited, in some proper Broth, every Hour, is singularly beneficial in difficult Labours. It is universally used, as a Medicine of uncommon Service, in promoting the Eruption of the Small-pox; and, in *England*, according to *Ray*, it is suspended in small Bags, under the Chin and Throat, for dissipating putrid and venomous Matter, left, stagnating in the Parts, it should excite an Inflammation, and strangulate the Patient. *Verulam* informs us, that a certain *Englishman*, who used to be excessively sick at Sea, had his usual Nauseas prevented by wearing a Bag of Saffron on the Region of his Stomach. Externally it is extol'd, as an excellent Ingredient, in Medicines calculated for Disorders of the Eyes. Thus *Geoffroy*, in Inflammations of the Eyes, orders the following Preparation.

Take of Fennel-water, four Ounces; and of Saffron, fifteen Grains: Triturate both together, in a Mortar, till the Water assumes a Golden Colour. Then the Liquor is to be separated from the Powder by Inclination, and mixed with an equal Quantity of stibiated Wine.

Or, according to *Friccius*,

Take a sufficient Quantity of the Whites of Eggs beat up with Rose-water, or Womens Milk; add Saffron, and apply to the affected Eyes.

*Avenzoar*, in Cataracts of the Eyes, orders them to be kept open over the Decoction of Saffron, in such a manner, that the Steam of it may affect them. For resolving inflammatory Tumors, and alleviating Pain, *Geoffroy* recommends an anodyne Cataplasm, prepared of

A Pound of the Crumb of the finest Wheaten Bread, broken between the Hands; of Cows Milk, a sufficient Quantity. These he orders to be boil'd, stirring them at the same time, and adding, towards the End of the Preparation, the Yolk of one Egg, and one Dram of Saffron, reduced to a fine Powder.

According to *Baubine*, Saffron, mixed with Milk, Oil of Roses, and a little Smallage, alleviates the intense Pains of the Gout, arising from a hot Cause. In arthritic Pains, and Erysipelas, a Linen Cloth, impregnated with Saffron, is said to be

a divine Remedy. *Mynsicht* gives the following Directions for preparing a Cloth of this Kind.

Take a Piece of new Hempen Cloth; wash it five or six times in Frogs-spawn, gathered in the Month of *March*, and so carefully filtrated, that the Granulations, resembling small black Eyes, may be separated from it. Suffer the Cloth to dry as often in a Shade, to which the Heat of the Sun has no Access. Then take of the Vinegar of Elder-flowers, and of Saffron, a sufficient Quantity. Make into a Tincture, in which boil the Hempen Cloth, till it assumes a deep Saffron-colour. Let it cool in this Tincture; then take it out, dry it, and preserve it for Use. After other necessary Precautions are taken, this Cloth, when anointed with *Venice* Soap, is to be applied to the Part affected.

According to *Baubine*, Saffron applied warm, mixed with a Lixivium and Oil of Olives, is of singular Service in Tumors in which a Gangrene is dreaded; and a Plaster of Lupins, boiled in a Lixivium and White-wine, with an Addition of Saffron, is said to be an excellent Remedy in Gangrenes. *Ettmuller* informs us, that Spirit of Wine, impregnated with Saffron, and applied, with a Linen Cloth, to the Fingers and Toes, when so injur'd by the Cold as that a Gangrene is dreaded, is an excellent Remedy. That Saffron contributes to the Cure of Wounds, is obvious from the Case of a Man, who, with a Hatchet, inflicted a deep Wound in his Foot; but, by washing the Wound with Wine in which Sugar was dissolved, and filling it with Saffron, he was cured. This Case we have in *Ephemer. Nat. Curios. Decad. 1. a. 3. o. 310.* According to *Laurentbergius*, the Bites of Spiders and Scorpions are cured by the Application of Saffron. It is applied externally, by way of Epithem, to the Forehead and Wrists, in order to alleviate Pain, and procure Sleep. Some, for the same Purpose, place Chaplets or Garlands of Saffron round the Head. According to *Wedelius*, in his *Opologia*, Nurses, in order to remove obstinate Watchings in Children, place a Bag, in which Saffron has been kept, below their Heads. But *Friccius*, upon this Passage of *Wedelius*, observes, that the Bag ought to be removed as soon as the Child is asleep. Saffron is also often used, in Conjunction with Opium, as we see in many of the Laudanums of the Shops. With the learned *Geoffroy* we may justly doubt, whether it corrects or augments the Effects of the Opium; or whether, as an Aromatic, it, by the Minuteness of its Parts, contributes to divide and resolve its tenacious and viscid Quality: For no one ever asserted, that Saffron was a more powerful Narcotic than Opium. Nor, in the mean time, does it seem proper for correcting or lessening its Virtues, because its Smell testifies, that it is possessed of narcotic Qualities. Besides, like Opium, when used in too large a Quantity, it induces Drunkenness, proves narcotic, or produces a Delirium; but, when moderately us'd, it calms the Mind. For this Reason it is recommended for exhilarating melancholic Patients, when sew'd up in a small Bag with Camphire, and wore on the Pit of the Stomach; but *Juncker* doubts whether this Practice be safe. According to *Baubine*, *Gesner* orders a little Saffron to be mixed with Broth, as a proper Means of Relief in melancholic Disorders. *Borelli*, in his *Observationes Medico-physicae, Cent. 2. Obs. 99.* informs us, that a certain Woman, by wearing Saffron on the Pit of her Stomach, was cured of Melancholy, and a perpetual Inclination to weep. *Schulzius*, in his *Prælectiones*, informs us, that the exhilarating Virtues of Saffron are sufficiently conspicuous in young Children, to whose Nostrils if an empty Glass, in which Essence of Saffron has been, is applied, they are immediately set a laughing. The Power of Saffron to excite Laughter is so well known, that it has become a Proverb, when one is easily set a laughing, to say, that *He eats Saffron*. But it seems to be an hyperbolic Expression of *Levinus Lemnius*, when he asserts, that the Heart is so miraculously refreshed by Saffron, that when the Ring Finger of the Left Hand is rub'd with it, it immediately penetrates to the Heart. From what has been said 'tis obvious, why it is call'd the *Hortus Lætitia*, and the *Medicina Tristitia*. *Dioscorides* and *Pliny* ascribe to Saffron a Virtue, by means of which it resists Intoxication. This Effect it may possibly produce as a subtle Aromatic, by opening and discussing, if it is not exhibited in too large a Dose; for whatever opens the Pores, lays a Foundation for the Elimination of the Wine by Perspiration. Perhaps, also, they ascribed this Virtue to it, because it procures sound Sleep to those who are drunk; for, by its mild and gentle Effluvia, it discusses the Uneasiness arising from excessive Drinking; by which means a calm and pleasant State being brought on, the Crapula is concocted, as *Plutarch* informs us in his *Sympos. Lib. 3. Probl. 1.* *Bodæus*, in *Theophrast.* is of Opinion, that Saffron, previously exhibited, discusses the ascending Vapours, and prevents their Arrival at the Brain; but that, when drank with the Wine itself, it exhilarates the Heart too much, promotes Ebriety, and assists the Strength of the Wine. But, to use the Words of the celebrated *Juncker*, "If we compare all these Encomiums with modern Experience, we

" Shall



" shall find the Virtues of Saffron less extensive, and much inferior to what they are generally said to be; for it is to be observed, that it must be exhibited in small Quantities; otherwise it excites violent Commotions of the Humours, Cephalalgias, Drunkenness, and Deliriums. Besides, if it is exhibited at the time when any Disease is accompanied with Heat and a Fever, various unhappy Symptoms are brought on by it. For this Reason 'tis to be doubted, whether it is proper in malignant Fevers; nor is it to be used, except in small Quantities, for promoting the Eruption of the Menfes and Lochia. Besides, tho' it in some measure rouses the languid Motions, and may with Success be exhibited in Difficulties of Breathing, and obstinate Coughs, yet it neither remarkably dissipates the Stagnations of the Humours, nor the Obstructions of the Viscera; nor is it so powerful in Disorders of the Lungs, as to deserve the Title of *Anima Pulmonum*; nor does it protract the Lives of phthisical and pleuritic Patients, much less procure a perfect Cure in these Disorders. But the external Use of Saffron is established upon surer and less precarious Foundations; for it is highly proper for an Erysipelas, and all inflammatory Tumors, especially for dispelling the serous Matter lodged in them, and alleviating the Pains with which they are accompanied. For this Reason it is frequently mixed with Epithems, medicated Bags, discutient or maturing Cataplasms or Plaisters. Nor is it unsuccessfully applied to the Eyes with Milk, in order to free them from Inflammations, or to defend them against Defluxions in the Small-pox." *Hoffman*, in his *Dissertatio de Remediorum domesticorum Præstantia*, gives us the following simple and easy Preparations of Saffron: " In obstinate Coughs, and Difficulties of Breathing, an Infusion of Saffron in the Water of Paul's Betony, with the Addition of a sufficient Quantity of Sugar-candy, is found to be of singular Efficacy. The same Infusion, prepared with Cinnamon-water, is highly beneficial for provoking the Menfes, facilitating difficult Labours, expelling the Secundines, and promoting the Lochia, especially when, at the same time, Oil of sweet Almonds is now-and-then exhibited. Externally, Saffron, boiled with Milk, the Flowers of Elder and Chamomile, and the Crumbs of Wheaten Bread, and applied by way of Cataplasm, wonderfully alleviates arthritic Pains. I have also known the same Remedy applied with Success for removing the Pain of the blind Hæmorrhoids. Saffron, put into Rose-water, with the Addition of a little Camphire, cures Inflammations of the Eyes in the Measles and Small-pox."

We shall now enumerate the Disadvantages attending the preposterous and unseasonable Exhibition of Saffron. *Dioscorides* then informs us, that three Drams of it, drank in Water, are said to prove fatal. *Galen*, in his Treatise *De Simplic. Medicament. Facultat. Lib. 5. Cap. 19.* classes Saffron among those Substances, which, when liberally used, either destroy the Patient's Reason, or procure his Death. And, in the second Book of his Treatise *De Compositione Medicamentorum*, he affirms, that the Smell of Saffron alone produces a Pain of the Head; and a little after, in the same Book, he classes it among such Substances as disturb and disorder the Mind. According to *Geoffroy*, *Cassius* informs us, that many, who have used a small Bag of Saffron by way of Cushion, have been seized with a Pain of the Head so intolerable as to put an End to their Lives. *Borelli*, in like manner, in his *Observationes Medico-physicæ, Cent. 4. Obs. 35.* gives us an Account of a certain Merchant's Servant, who, using to lie down and sleep near a large Quantity of Saffron, was seized with so intense a Pain of his Head, and a Weakness of his Heart, that he died. He also tells us, that he was informed, that Horses, which carry Loads of Saffron, generally died of a Discharge of bloody Urine. *Priccius* also, from the *Veterinarii*, informs us, that a small Quantity of Saffron, exhibited to the strongest Horse, proves fatal to him, by exciting an immoderate Discharge of Urine. *Amatus*, in *Dioscorid.* gives us an Account of one *Agaso*, a Native of *Pesaro*, who, happening to sleep upon two small Bags of Saffron, died the same Night. And, according to the same Author, a certain Merchant, after throwing a large Quantity of Saffron into a Pot containing some Soup, which he intended for his Supper, was, upon eating the Soup, seized with so violent a Fit of Laughter, that he was near dying. *Serapio*, from *Rhasis*, affirms, that Saffron intoxicates very much, if mixed with Wine, and produces a Cheerfulness next to Madness. *Koniginus* informs us, that, at *Rasil*, Saffron produced Cephalalgias, and excessive Laughter, in such as mix'd too large a Quantity of it with their Wine. According to *Casspar Hoffman*, in his Treatise *De Medicamentis officinalibus*, *Julius Alexandrinus* gives us a similar Instance, in the following Words: " I myself saw a Woman of Distinction, at *Trent*, who was seized with an immoderate Fit of Laughter for three Hours; and her Misfortune was produced by too large a Quantity of Saffron, exhibited with an Intention to provoke her Menfes." *Riverius* informs us, that he knew a Woman, who, by taking too large a Dose of Saffron, with a View of restoring her Menfes, had them discharged so immoderately,

that she dy'd in three Days time. *Simon Pauli* uses the following Words: " I remember," says he, " that a certain Virgin, labouring under a Suppression of the Menfes, endeavour'd to provoke them by the Use of Saffron; but, by this very means, she exposed her Life to imminent Danger; for, tho' she was marry'd immediately after, she has ever since been afflicted with continual and intense Head-achs, tho' she is now seventy Years of Age." *Baubine* informs us, that he had somewhere read, that the Stamina of Saffron, triturated, and applied to the Wrists, or under the Breasts, convey'd their Qualities immediately to the Heart and Brain, produced a Vertigo, attended with Dimness of Sight, and weaken'd the Eyes. From the immoderate Joy, and excessive Laughter, excited by the Use of Saffron, *Linde Stolpe* suspects, that it was the *Nepenthe* of *Homer*.

From what has been said 'tis sufficiently obvious, that, as the moderate Use of Saffron is beneficial in several Diseases, so, when exhibited unseasonably, in too large Doses, or for too long a Time, it proves highly prejudicial to Health. For this Reason it is, by *Boerhaave*, classed among the narcotic Poisons; and the Antidotes to it are aqueous, oleous, acidulated Vomits, and such as have Honey for an Ingredient. These are to be used in large Quantities, and often repeated: Clysters also, and Baths, of the same Ingredients, are to be employ'd. But, because Saffron is a narcotic Aromatic, possessed of heating Qualities, and which, by reason of the Smallness and Subtlety of its Parts, penetrates to the Humours, throws them into Commotions, and stimulates the Solids, it ought not to be used in Cases where the Stimulus of the Solids, and an Increase of Motion in the Fluids, would produce bad Consequences. For this very Reason it must be sparingly and cautiously exhibited to plethoric Patients, and to tender Children; as also in burning, bilious, and inflammatory Fevers, critical Hæmorrhages, especially when the Matter to be eliminated is of a malignant Nature; as also in painful Spasms, which are often salutary, and assist the Propulsion, or throwing off, of the Impurities stagnating or fix'd in the small Vessels, or contribute to the Ejection of virulent Matter. In old Men, who begin to labour under a Dryness and Rigidity of the Fibres, accompany'd with a Penury of gelatinous Lymph, it does not procure Sleep, but rather induces Watchfulness, increases the Driness and Imbecillity of their Fibres, and disturbs their Imaginations. The same Effects are to be apprehended in Patients of dry, bilious, and choleric Habits, who, in consequence of the Sensibility and brisk Oscillation of their Solids, and the hot Quality of their Humours, receive no friendly Impression from Substances which produce strong Commotions, but are severely injured, and often thrown into maniacal Disorders or Deliriums, by them. 'Tis, therefore, obvious, that pregnant Women, and those who are subject to too copious Discharges of the Menfes, to Apoplexies, and lethargic Disorders, ought to abstain from the Use of Saffron. *Schulzius*, in his *Prælectiones*, justly advises, that all Preparations of Saffron should be cautiously exhibited to Women in the Flower of their Age. That Saffron ought to be cautiously used in external Applications, especially to the Head, we learn from the *Ephemerid. Nat. Curios. Decad. 2. a. 4. o. 67.* where we have an Account of a Woman, who, labouring under a putrid Fever, applied a Linen Cloth, impregnated with the Effluvia of Saffron, to her Temples, in order to promote Sleep; but she was forthwith seized with a Heat of her Stomach, which was not abated till the Cloth was removed. I think it is obvious, not only from this Case, but also from what has been before said, how imprudent a Part the common People act, who, without the Knowledge of the Physicians, and against their Advice, in Phrensies, acute Fevers, and obstinate Watchings, have recourse to Saffron as an approved Remedy, and think, that they may safely and innocently tie up the Heads of Patients, afflicted with these Symptoms, with Cloths impregnated with Saffron. 'Tis, on the contrary, obvious, that Saffron is a Remedy adapted to those who have cold Constitutions, to the Leucophlegmatic, and such as labour under Diseases arising from a cold Cause. For this Reason we understand why *Fernelius* asserts, that it powerfully assists lethargic Patients. *Zwelfer* is of Opinion, that the best Form of exhibiting Saffron, in Cases where it is proper, is to add it to Medicines in Substance, or to prepare an Essence from it; that its Extract is defective, with respect to several Virtues, because, in the Abstraction of the Menstruum to the due Consistence of an Extract, many of the spirituous and volatile Parts fly off; but that these finer Parts of the Saffron are retained in the Distillation of a Water from it, whilst the more valuable, corroborating, terrestrial, and efficacious Parts, subside in the Distillation, so that the distill'd Water must be entirely destitute of them. But, with respect to the salutary or hurtful Dose of Saffron, Authors are by no means agreed, since, as *Geoffroy* observes, some affirm, that half a Scruple, and others that a Scruple and an half, may safely be exhibited internally. But *Rhasis* affirms, that, with good Success, he exhibited two Drams of Saffron, in order to promote a Delivery: But *Casspar Hoffman* thinks, that this is an Error of the Printers, who for two Scruples have placed



placed two Drams; for *Dioscorides*, and after him *Serapio*, *Avicenna*, and others, inform us, that three Drams of it prove mortal. But, according to *Etmuller*, the Inhabitants of *Poland* are so accusom'd to the Use of Saffron, that they often mix an Ounce of it with their Aliments; but the Force of Custom is sufficiently obvious from a long-continued Use of Opium, a Dram or two of which may be safely taken every Day by those who have been gradually habituated to it; tho' three, four, or five Grains were once sufficient to have destroy'd them. Saffron may, therefore, safely be prescribed in Sub-stance, from half a Scruple to a whole Scruple, or even half a Dram. Let me add, that the largest Dose, for such as are not accusom'd to it, ought not to exceed half a Scruple.

#### PROCESSES upon SAFFRON.

Nature has prepared, in certain particular Parts of certain Vegetables, a determined kind of Body, so different from all others, as scarce to be refer'd to any other known Kind; and has, at the same time, endow'd it with Virtues, otherwise inimitable. We have an Example of this in the Chives of Saffron. It is incredible how rich this Saffron is in Colour, Taste, Odour, and Virtue; how small the Bulk is, that possesses all these rich Faculties; and how tender, and easily corruptible, the Thing itself is; and therefore requires a peculiar Method of Operation.

Take, therefore, two Ounces of the choicest *English* Saffron, dried, and either cut small, or remaining whole; put it into a clean Bolt-head with a long and slender Neck; pour upon it so much of the purest Alcohol, containing no foreign Substance, as may float four or six Inches above it: Then stop the Glass slightly with a Wreath of Paper, and set it in a Heat of only a hundred Degrees. Leave it thus in Digestion for three Days, the Vessel being often shook: Let it afterwards rest, for twenty-four Hours, in a cold quiet Place; then carefully strain off all the tinged Liquor thro' a Piece of clean Linen, placed in a Funnel set in a clean Glass, and keep it closely stop'd. It will be of a bright-red Colour; the Saffron, remaining at the Bottom of the Glass, will be found paler than before. To this pour the like Quantity of fresh Alcohol, and proceed as before; and mix the Tincture, thus acquired, with the former: The Saffron will now remain paler. If more Alcohol be added to it, and the Process be repeated, a still poorer Tincture will be obtain'd, which ought to be kept separate: The Saffron will now become pale, but otherwise will have the same Appearance and Bulk as before. To this if Water be added, digested therewith, and pour'd off, it will be of a yellow Colour: Put on fresh, and continue thus, till more Tincture can be extracted; and now the Chives will appear quite white; and, if gently dried, will retain their former Figure, tho' they appear much shrunk, perfectly inodorous, and insipid, so as scarcely to be distinguish'd from Bits of clean Thread: Whence it is wonderful, where the Seat of that surprising Matter, extracted from it, should be, which is found to give so rich a Tincture to so large a Proportion of Alcohol. Let the Tincture, procured by the two first Digestions, be distil'd in a Glass Body, fitted with its Head, and perfectly well closed, with a Fire of a hundred Degrees, till about an Ounce remains behind; which, when cold, is to be pour'd into a Glass Vessel, to be kept carefully stop'd. It will prove of an exceeding red Colour, a highly fragrant Odour, and a bitter, aromatic, penetrating Taste, and have the Consistence of thin Oil. Let it be kept under the Title of *The essential Extract of Saffron*. The Spirit that came over in the Distillation will be limpid and colourless; but retain the grateful and aromatic Smell and Taste of Saffron. This is to be reserved for the same Operation upon fresh Saffron; and thus every time becomes the richer.

#### R E M A R K S.

This surprising Experiment shews us a new Species of Matter, which we can neither call Oil, Spirit, Gum, Resin, Gum-resin, Wax, or Balsam; but it is something perfectly singular, and of a spirituous oily Nature. This Extract mixes with Water, Spirit, and Oil; and has such exhilarating Virtues, that, being used too freely, it occasions an almost perpetual and indecent Laughture; but, used moderately, it becomes properly exhilarating. It tinges the Urine red, and is particularly said to destroy the petrifying Power thereof in the Kidneys, and therefore to be an extraordinary Remedy against the Stone. It is the true *Arzoph* of *Paracelsus*. There is no Occasion previously to digest the Saffron with Bread, in the Heat of Horse-dung, in order to procure its Tincture, which is thus render'd rather worse than better; for, in our

present Preparation, all that is efficacious is brought together without Loss, or impairing its peculiar Virtues, or any sensible Change. And these Preparations, being miscible with any Liquor, and of a very penetrating subtile Nature, easily enter the finest Vessels of the Body, and, by their extraordinary Mobility, diffuse their Virtue thro' the Whole, and chiefly excite the animal Spirits. Lastly, they have that admirable Virtue, which the Author of Nature has planted in them, and which can never be explain'd upon any Principle, and can only be known by itself. *Boerhaave's Chymistry*.

#### SPIRITUS CROCI: Spirit of Saffron.

Take of the best *English* Saffron, four Ounces; Spirit of Wine, four Pints: Let them digest together, in a Retort, a Week or two; then, in a Sand-heat, draw off the Spirit to Dryness. Put to the Residuum two Pints more of Spirit; and, after the same Digestion, draw that off also, and mix with the former. Put the Whole back again, and draw a third time. Let the Residuum be cleaned out with a little fresh Spirit, as little as can be; then strain it hard, and evaporate the Liquor into an Extract.

The College order this Distillation but once; yet by repeating, as here directed, the Saffron may, almost all, be brought over: But the Juncures must be well luted, and all Parts of the Operation managed with Dispatch and Dexterity; otherwise as much of the finer Parts will be lost, as will be obtain'd by such Repetition. What is got, indeed, this way, is lost in the Extract; and, therefore, the Operator may manage it as either of the Medicines are depended upon. If the Spirit be but once drawn, the Residuum may be mix'd, and digested with a sufficient Quantity of *Canary*; then strain'd, clarify'd, and made into a Syrup, as good as can be made from the fresh Saffron; for, in the Distillation, nothing rises which can be retain'd in a Syrup, howsoever made. This Spirit is one of the greatest Cordials which Medicine can produce; and has the Advantage, at the same time, of being a noble Alexipharmic, and disposing the Patient to sweat, if it be duly encouraged. It may be given from one Dram to one Ounce, or more, at a Dose, and repeated as often as there is Occasion, in any proper Diluter. The Extract is seldom given alone, and is fit for no Form but Pills or Boles, wherein it may be mix'd, from two Grains to twelve Grains for a Dose.

#### SYRUPUS CROCI: Syrup of Saffron.

Take of the *English* Saffron, one Ounce: Infuse it in one Pint of *Canary*; and digest them together, in a close Vessel, by a gentle Heat, for three Days; then press out the Wine, and dissolve in it twenty Ounces of the finest Loaf Sugar, so as to make it into a Syrup.

This hath not, till now, been order'd in any College Dispensatory, altho' much directed in extemporaneous Practice; and it seems to be one of the best of the simple Syrups, because capable of containing enough of the Ingredient, in one Dose, to answer some Intention of Consequence, which can be said but of very few others.

#### TINCTURA CROCI: Tincture of Saffron.

Take Saffron, half an Ounce; Treacle-water, half a Pint: Digest for six Days, and then strain it for Use. It may be also made with *Canary*, or *French Brandy*.

This is often prescrib'd as a Cordial, and an Alexipharmic, in Fevers, and whatsoever Disorders require sweating, or driving out by the Skin. But it soon loses its Colour, as Saffron will do in any thing which is acid: For this Reason some make it with other Menstrua. This is given from two Drams to one Ounce, or more, at a Dose.

#### EMPLASTRUM OXYCROCEUM.

Take of Saffron, two Ounces and a half; of Pitch, Colophony, and yellow Wax, of each four Ounces; of Turpentine, Galbanum, Gum Ammoniacum, Myrrh, Olibanum, and Mastich, of each one Ounce and three Drams. To the melted Wax put the Pitch, clear'd of all Dross, and strain'd, as also the Colophony; and, after they are melted together, taken off the Fire, and a little cool'd, mix with them the Galbanum and Ammoniacum, dissolved in Vinegar, strain'd, and boil'd to the Consumption of the Vinegar; as likewise the Turpentine: Then sift in the Mastich and Myrrh, powder'd separately; and, last of



all, the Saffron. Stir them all well together, and make them into a Plaister, according to Art.

This is ascrib'd to *Nicolaus Myrepsus*, in the *August. Dispensat.* as likewise by the first of the College, into which it is transcrib'd; but here the Quantity of Saffron is much abridged. This seems to have taken its Name from the Saffron and Vinegar, both which are express'd by it, notwithstanding the small Share Vinegar hath in it; and, indeed, the *Augustan* Collection gives one Prescription, under this Title, from *Vigo*, which is also in the first Edition of the College, that hath in it neither Saffron nor Vinegar; but that whole Composition is very justly censured by *Zwelfer*. The *Pharmacopœia Regia* gives likewise a Prescription bearing this Title, and not greatly differing in Materials. This hath been in great Esteem for many Intentions of Consequence; tho' *Hildanus*, *Cent. 4. Obs. 99, 100.* takes notice of some Inconveniences and Mischiefs arising from its Use. The Manner of its Composition hath been very particularly directed by *Zwelfer*; but what the College have thought fit to give here, is sufficient for any Compounder. Notwithstanding the Abridgment of the Saffron in its Quantity, (which, in some measure, might probably be from the Virtues of ours being so much beyond any that is foreign) yet the Covetousness of our wholesale Medicine-makers has found out a Way to diminish even that; and, it is to be fear'd, sometimes to imitate its Colour, without putting in any Saffron at all; so that it is incumbent upon us to be cautious, when any great Dependence is had hereupon. It is principally used to warm and strengthen debilitated Parts.

*CROCUS Germanicus, Saracenicus, Spurius, or Sylvestris*, are Names for the *CARTHAMUS*, which see.

*CROCUS Indicus* is the *CURCUMA*, *Turneric*. See *CURCUMA*.

*CROCUS* is also a Name given to some Preparations of Metals, calcin'd to a red or deep-yellow Colour. Thus there is the *Crocus Martis aperiens*, and the *Crocus Martis astringens*. See *MARS*. Thus also Copper, reduced to a reddish Powder by a strong Calcination, is call'd *Crocus Veneris*.

*CROCUS METALLORUM* is an emetic Preparation of Antimony with Nitre; for which see *ANTIMONIUM*.

*CROCUS* also is sometimes used to express the Yolk of an Egg.

*CROCODES*, *κροκώδης*. An Epithet for certain Troches or Pastils mention'd by *Paulus Aegineta*, *L. 7. C. 12.*

*CROCODILION*. A Name for the *Echinopus*; *major*. *Glove-thistle*.

*CROCODILUS*, *Offic. Jons. 141. Tab. 79. Schw. Rept. 145. Aldrov. Quad. Ovip. 677. Charlt. Exer. 29. Gefn. de Quad. Ovip. 9. Rondel. de Pisc. 2. 234. Bellon. de Aquat. 41. Obs. ed. Clus. 104. Lacertus omnium maximus, Crocodilus dictus*, *Raii Synop. A. 261. Sloan. Hist. Jam. 2. 332. THE CROCODILE, OR ALLEGATOR.*

The Blood of this Animal is said to clear the Sight; and the Fat is recommended for Wounds and Cancers. *Dale* from *Johnson*.

*CROCOMAGMA*, according to *Dioscorides*, is prepared of *Unguentum Crocinum*, and Spices press'd, and made into Troches. The choicest *Crocomagma* is what is sweet-scented, mix'd with a moderate Quantity of Myrrh, ponderous, black, free from Chips, when sufficiently diluted, giving the Colour of Saffron, smooth, bitterish, and dying the Teeth and Tongue with a Colour which lasts for many Hours: Such is the *Crocomagma* imported from *Syria*.

It absterges such Things as darken the Pupil of the Eye, provokes Urine, heats, mollifies, and concocts; and answers in some measure to the Virtues of Saffron, of which it is principally composed. *Dioscorides, Lib. 1. Cap. 26.*

*CROMMYON*, or *CROMYON*, *κέρμυον*, or *κέρμυον*. An Onion.

*CROMMYOXYREGMIA*, *κρομμυόξυς γρμία*. Acid and fetid Eructations resembling the Taste of Onions.

*CROPIOT*. A small Fruit, mention'd by *Clusius* and *J. Bauhin*, like the *Ethiopian* Pepper, containing a small black Seed.

*CROTALARIA*.

The Characters are,

It hath single Leaves, in which it differs from *Rest-harrow*; and the Pods are turgid, in which it differs from *Spanish Broom*.

*Boerhaave* mentions five Species of this Plant.

1. *Crotalaria*; Asiatica; folio singulari, verrucoso; floribus cœruleis. *H. D. Deser. & Ic. 199. a. Prægn.* ASIATIC CROTALARIA, WITH A SINGLE-WARTED LEAF, AND BLUE FLOWERS.

2. *Crotalaria*; Asiatica; folio singulari, cordiformi; floribus luteis. *H. L. Deser. & Ic. 201. a. Prægn.* ASIATIC CROTALARIA, WITH A HEART-SHAPED LEAF, AND YELLOW FLOWERS.

3. *Crotalaria*; Africana; styracis folio; flore cœruleo. *T. 644. Genista, arborescens, Africana, styracis folio, flore cœnu-*

*leo. H. L. Arbor, siliquosa, Africana, Genistæ semine.* Barthol. Aët. Hafn. Anno 1673. Observat. 131. *Crotalaria, Arbor, Africana, styracis folio molli, incano, flore cœruleo.* Amm. Charact. Plant. 241. *H. Prægn.* AFRICAN CROTALARIA, WITH A LEAF OF THE STORAX-TREE, AND A BLUE FLOWER.

4. *Crotalaria*; Afra; arborescens; eadem; minori folio. *H. Prægn.*

5. *Crotalaria*; Asiatica; folio argenteo, villoso; flore luteo; siliquis pendulis in Spicâ. *a. Prægn. Boerh. Ind. alt. Plant. Vol. 2.*

No medicinal Virtues have yet been discover'd in these Plants.

*CROTALISTRIA*. A Name for the Stork. See *CICONIA*.

*CROTAPHI*, *κρόταφαι*. The Temples.

*CROTAPHITÆ*, *κροταφίται*. The temporal Muscles.

*CROTAPHIUM*. This sometimes implies a Pain in the Head, near the Temples.

*CROTON*, *κρότων*. The Plant call'd *Ricinus*. In *Hippocrates* it also imports the Bronchia of the Lungs, discharged by Expectoration, according to *Foessius*.

*CROTONE*, *κρότων*, is properly a fungous Excrecence on Trees, as appears from *Theophrastus de Plantis, Lib. 1. Cap. 13.* but is, by a Metaphor, apply'd also to Excrecences and fungous Tumors on the Periosteum. *Castellus*.

*CROUMATA*, *κρούματα*, from *κρούω*, to beat, in *Hippocrates, Lib. 1. περὶ διαίτ.* are the musical Tones resulting from the Pulsation of Instruments of Music. *Foessius*.

*CROUSMATA*, *κρούσματα*. This Word occurs in *Myrepsus, Sect. 10. C. 1.* The Translators render it *Defluxiones*, Rheums. But *Fuchsius* thinks it ought to be read *ρεύματα*.

*CRUCIALIS*. An Epithet, used by Surgeons, for an Incision made in such a manner as to cross another Incision.

*CRUCIALIS*, in Botany, is the *CRUCIATA HIRSUTA*.

*CRUCIATA*. A Plant so call'd, because the Leaves are disposed in the Form of a Cross.

The Characters are,

It hath soft Leaves, like the *Gallium*, (*Ladies Bed-straw*) four being placed at every Joint of the Stalk; in other respects it resembles the *Mollugo* (*Bastard Madder*).

*Boerhaave* divides the Species of this Plant into spicated, and verticillated.

The spicated are,

1. *Cruciata*; glabra; folio nervoso, rigido; baccâ gemellâ, siccâ, hispida; flore lacteo. *Rubia erecta, quadrifolia. J. B. 3. 716. Mollugo montana, erecta, quadrifolia. Raii Syn. 117.*

2. *Cruciata*; glabra; folio rotundiore, nervoso, rigido, minori; Baccâ gemella, sicca; flore lacteo.

3. *Cruciata*; palustris; parva; procumbens; flore albo spicato. *Gallium palustre album. C. B. P. 335.*

4. *Cruciata*; glabra. *C. B. P. 325. SMOOTH CROSS-WORT.*

5. *Cruciata*; Orientalis; latifolia; erecta; glabra. *T. Cor. 4. H. UPRIGHT AND ORIENTAL CROSSWORT, WITH BROAD SMOOTH LEAVES.*

The verticillated are,

1. *Cruciata*; minima; sessilis; flosculo albo verticillato.

2. *Cruciata*; angustifolia; flosculo luteo, verticillato. *Rubia, repens, lutea, foliis spinosis. C. B. P. 334. Rubia, minima, Lobelii. Lugd. 1330.*

3. *Cruciata*; tomentosa; flosculis luteis in Corniculis longis, hispida. *a. Boerh. Ind. alt. Plant. Vol. 1.*

Neither of these seem to be the same as the following *Cruciata*, by the Names, tho' the Virtues ascribed to them are alike.

*CRUCIATA*, *Offic. Ger. 965. Emac. 1123. Raii Hist. 1. 479. Synop. 3. 223. Cruciata vulgaris, Park. Theat. 566. Volk. 129. Cruciata hirsuta, C. B. Pin. 335. Dill. Cat. Gisl. 67. Hist. Oxon. 3. 328. Rupp. Flor. Jen. 3. Bux. 88. Cruciata vel Crucialis, Gallii species quibusdam, Chab. 549. Gallium latifolium, Cruciata quibusdam, flore luteo, J. B. 3. 717. CROSSWORT. Dale.*

This Crosswort, from a slender creeping Root, sends forth several hairy Branches, which grow to be about a Foot high; having at the Joints, which are pretty numerous, four small, somewhat broad, and round-pointed Leaves, which are also pretty hairy, and set on without Foot-stalks; from the Bosoms of which arise, as it were in Whorles, many small four-leaved yellow Flowers, or rather one single Flower cut in four Parts, each of which is succeeded by two small, round, black Seeds. It grows in Hedges, and Borders of Fields, particularly in *Hampstead Church-yard*; but it is not very common about *London*; and flowers in *July*. The Leaves and Tops are used.

This is reckon'd among the vulnerary Herbs, being of a drying and binding Nature; and is particularly commended for the



the Swelling of the Scrotum, which is caused by the Falling-down of the Intestines into it. *Miller's Bot. Off.*

The Decoction of this Herb is thought to be good for Rup-tures, taken in Wine. *Tournefort.*

*Camerarius* recommends it for promoting the Expectoration of viscid Humours.

**CRUCIBULUM**, *Gatinus fusorius*, *Tigillum*, a *Crucible*, is an earthen Vessel, capable of sustaining the highest Degree of Fire, wider above than below, either of a round or triangular Form, and appropriated to the fusing and calcining of Minerals; as also to other chymical and pharmaceutical Operations. The Crucibles most generally used are those of *Hesse* and *Austria*; but, because the former are sandy, and cannot sustain the Fire after they are made wet, and the latter are blackish, from the Admixture of Iron in their Composition, those of *Hesse* are less capable of resisting Lead, and those of *Austria* less proper for the Preparation of Salts and Antimony. For this Reason many prefer that Mixture, of which the Glass-founders make their Crucibles. Others order the Powder of common Tiles, and an equal Quantity of Chalk, to be mix'd with Linseed-oil, and made into the Form of a Crucible; after which it is to be baked, till it assumes a proper Hardness. Others order a large Piece of Chalk to be cut into the Form of a Crucible, and boil'd in Linseed-oil for twenty-four Hours. This, when dry, they use as a Crucible. The Mixture of *Becher*, which for a long time retains the Glass of Lead, which is not easily done, consists of two Parts of a fat oleous greenish Earth, with apparently metallic Veins every-where running thro' it, one Part of Tobacco-pipe-clay, or such as the Glass-founders use for their Furnaces and Vessels. These, when triturated together, and pass'd thro' a fine Sieve, are to be moisten'd with Water, in which Quick-lime has been extinguish'd. They are to be carefully agitated together, till they are so mix'd, that the earthy Particles are not to be distinguish'd from each other. This Mass is to be form'd into Crucibles, which are to be dried and boil'd. *Charas*, in his *Pharmacopœia Regia*, gives the following Directions for making Crucibles:

Take equal Parts of the best Potters-clay dried, of plumose Alum, and of Bastard Talc, commonly call'd *Lapis Glacialis*: Let them be finely triturated, and mix'd up with Whey, to a Consistence fit for making Crucibles; which are to be harden'd, and treated in the same manner with other earthen Ware.

**CRUDITAS**, Crudity. It is apply'd to unripe Fruits; to raw Flesh; to undigested Substances in the Stomach; to Humours in the Body, which are unconcocted, and not prepared for Expulsion; and to the Excrements.

**CRUNION**, *κρίνιον*. The Name of a compound Medicine describ'd by *Actius*, celebrated for provoking Urine.

**CRUOR**. Sometimes it signifies the Blood in general; sometimes only the venous Blood; and sometimes extravasated or coagulated Blood.

**CRUPINA**. A Plant, call'd also *Cyanus pulchro semine Centaurii majoris*, J. B. *Chondrilla rara purpurea*, *Crupina Belgarum dicta*, Park. *Chondrilla Hispanica*, Ger. *foliis laciniatis serratis, purpurascens flore*, C. B. THE BEARDED CREEPER. *Raii Hist. Plant.*

I find no medicinal Virtues attributed to this Plant.

**CRURA CLITORIDIS**. The two spongy Bodies which form the Clitoris, before their Union, are thus call'd. See **GENERATIO**.

**CRURA MEDULLÆ OBLONGATÆ**. The two largest Legs, or Roots, of the *Medulla Oblongata*, which proceed from the *Cerebrum*, are call'd by this Name.

**CRURÆUS MUSCULUS**, or **CRUREUS**. This is a fleshy Mass, covering almost all the fore Side of the *Os Femoris* between the two Vassi, which likewise cover the Edges of this Muscle on each Side.

It is fix'd to the fore Side of the *Os Femoris*, from the anterior Surface of the great Trochanter, down to the lowest Quarter of the Bone, by fleshy Fibres, which run down successively over each other, between the two Vassi; and are partly united to these two Muscles, so as not to seem to form a distinct Muscle.

It is not so thick as the two Vassi; and, as it is cover'd by them on each Side, a sort of fleshy Chanel is form'd by all the three, in which the Rectus is lodged, covering the fore Part of the Crureus.

It terminates below in a tendinous Aponeurosis, which joins the back Side of the Tendon of the Rectus anterior, and the neighbouring Edges of the Extremities of the two Vassi. These four Muscles form a common Tendon, which is inserted in the Side of the Patella, in the Edge of the Ligament of that Bone, and in the adjacent lateral Part of the Head of the Tibia. *Winflow's Anatomy.*

**CRURALIS**. An Epithet of the Artery which conveys Blood to the Crura, Legs; and of the Veins by which this Blood returns towards the Heart.

**CRUS**. The Leg, including the Whole of one of the lower Extremities, from the *Os Innominatum* to the Toes.

#### *Of the Inferior Extremities.*

The inferior Extremities comprehend all those Parts depending from the Acetabula of the *Ossa Innominata*, and are commonly divided into three Parts, viz. the Thigh, Leg, and Foot.

The Thigh (*Μυῖν, Femur, Coxa, Agis, Anchæ os, Crus, Femur*) has only one Bone, which is the longest of the Body, and the largest and strongest of any of the cylindrical Bones. The Situation of it is not perpendicular: For the lower End is inclined considerably inwards; so that the two Knees are near contiguous, while there is a considerable Distance between the Thigh-bones above. This is of good Use to us, since sufficient Space is thereby left for the external Parts of Generation, the two great Cloacæ of Urine and Fæces, and for the large thick Muscles which move the Thigh inwards; and at the same time this Position renders our Progression quicker, surer, straighter, and in less Room. For had the Knees been at a Distance from each other, we must, to have made a long Step, have been obliged to describe some Part of a Circle with the Trunk of our Body; and, if one Leg was raised from the Ground, our Centre of Gravity would have been too far from the Base of the other, and we should consequently have been in Hazard of falling; so that our Steps would neither have been straight nor firm, nor would it have been possible to walk in a narrow Path, had our Thigh-bones been otherwise placed. In consequence however of the Weight of the Body bearing so obliquely on the Joint of the Knee by this Situation of the Thigh-bones it is, that weak rickety Children become inkneed.

The superior Extremity of the Thigh-bone is not continued in a straight Line with the Body of it, but is set off obliquely inwards and upwards, whereby the Distance between these two Bones is considerably increased above. When this Extremity first goes off, it is small, but afterwards is formed into a large round Head (*Vertebrum*) which is the greater Portion of a Sphere unequally divided. This Head is smooth, and covered with a Cartilage to play in the Acetabulum Ischii. Towards its inferior internal Part a round rough spongy Pit is observable, where the strong Ligament, which is commonly called the round one, but that is of rather an oval Figure in its transverse Sections, is fixed, to be extended from thence to the inferior internal Part of the receiving Cavity, where it is considerably broader, than in its Progress to the Head of the Thigh-bone. The Neck of the *Os Femoris* has a great many large Holes, into which the Fibres of the strong Ligament, that covers it, enter, and are thereby securely united to it; and round the Root of the Neck, where it rises from the Bone, a rough Ridge is found, where the circular Ligament of the Articulation is connected. Below the back Part of this Root, the large unequal Protuberance, called the Trochanter major, (*Γλυντὸς, Rotator Natis, Malum granatum testiculorum*) is observable; at the superior Root of which, a Cavity is left for the Insertion of the *Musculus Gluteus minimus*; and immediately without that, is another, where the *Pyriformis*, *Marsupialis*, and *Gemini*, are inserted. On the superior Extremity of this Process is a smooth flat Surface, where the *Gluteus medius* is attached; and, without and below that, a large smooth Surface is to be seen for the Insertion of the *Gluteus maximus*. From the posterior Face of the Root of this great Trochanter, a rough Ridge runs backwards and downwards, into which the *Quadratus* is inserted. In the Hollow, at the internal Side of this Ridge, the *Obturator externus* is implanted; and at its interior Extremity we find a conoid Process called Trochanter minor (*Rotator minor*) into which the *Musculus Psoas*, and *Iliacus internus*, are inserted, and the *Pectineus* is implanted into a rough Hollow below the internal Root of it. The Muscles inserted into these two Processes, being the principal Instruments of the rotatory Motion of the Thigh, have occasioned the Name of Trochanters to the Processes.

The Body of the *Os Femoris* is convex on the anterior Part, and made hollow behind by the Action of the Muscles which move upon it, and for the Convenience of sitting, without bearing so much on these Muscles; and probably the Weight of the Legs depending from the Thighs in that Posture contributes considerably to this Curvature. The anterior Surface is a little flatten'd above by the Beginning of the Crureus Muscle, as it is also below by the Rectus and Crureus. The external Surface is likewise made flat below by the *Vastus externus*, where it is separated from the former by an obtuse Ridge. The *Vastus internus* depresses a little the internal inferior Surface. The posterior concave Surface has a Ridge rising in its Middle, commonly called *Linea aspera*, into which the Triceps is inserted. At the superior Part of it the medullary Vessels enter by a small Hole, which runs obliquely upwards, a little above which is a rough Fossa or two, where the tendinous Expansion of the *Gluteus maximus* is fixed. The inferior Extremity of the *Linea aspera* divides into two, stretching to each Side; the long



long Head of the Triceps being inserted into the internal, and the short Head of the Biceps Flexor Tibiæ rising from the external. Between these two rough Lines, the Bone is made flat by the large Blood-vessels and Nerves which pass upon it; and, near the Extremity of each of these Ridges, a small smooth Protuberance may often be remarked, where the two Heads of the Musculi Gastrocnemii externi take their Rise, and the sesamoide Bones, described by Vesalius, (*lib. 1. cap. 28. & 30.*) sometimes are found.

The inferior Extremity of the Os Femoris is larger than any other Part of it, and formed into a great Protuberance on each Side, called its Condyles; between which a considerable Cavity is found, especially at the posterior Part. The internal Condyle is longer than the external, which must happen from the oblique Position of this Bone, to give less Obliquity to the Leg. Each of these Processes seems to be divided in its plain smooth Surface. The Mark of Division on the external is a Notch, and on the internal a Protuberance. The anterior Part of this Division is formed like a Pulley, the external Side of which is highest. On it the Rotula plays. The posterior Part has two oblong large Heads, whose greatest Extent is backwards for the Motion of the Tibia; and from the rough Cavity between them, but near the Base of the internal Condyle, the strong Ligament, commonly called the cross one, has its Rise. The Sides of the Condyles are made flat by the Muscles passing along them; and on the back Part of the internal Side a slight Fossa seems to be made by the Tendons of the Gracilis and Sartorius; but on the external a considerable Depression is formed by the Biceps Flexor Cruris. A little farther forward than where these Depressions are on each of the Condyles, the lateral Ligaments of the Joint of the Knee rise out from the Os Femoris. Round this inferior Extremity of the Thigh-bone, large Holes are found, into which the Ligaments for the Security of the Joint are fixed, and Blood-vessels pass to the internal Substance of the Bone.

All the Processes of the Femur in new-born Children are cartilaginous, and afterwards become small Apophyses, with large Epiphyses.

The Thigh-bone is articulated above with the Acetabulum of the Os Innominata by Enarthrosis, and therefore can be moved to every Side; but is restrained in its Motion outwards by the high Brims of the Cavity, and by the round Ligament; for otherwise the Head of the Bone would be frequently thrust out at the Breach of the Brims on the Inside, which allows the Thigh to move considerably inwards. The Body of this Bone enjoys little or no rotatory Motion, tho' the Head most commonly moves round its own Axis, because the oblique Progress of the Neck and Head from the Bone is such, that the rotatory Motion of the Head can only bring the Body forwards and backwards; nor is this Head, as in the Arm, ever capable of being brought to a straight Direction with the Body. So far however as the Head can move within the Cavity in a Circle backwards and forwards, the rest of the Bone may have a partial Rotation. The Os Femoris is articulated below to the Tibia and Rotula by Ginglymus.

The Leg (*Κνήμη, Crus, Tibia*) is composed, according to the common Account, of two Bones, Tibia and Fibula, tho' it seems to have a very good Title to a third, the Rotula; since this, tho' a distinct Bone, bears a strong Analogy to the Olecranon or superior great Process of the Ulna. Therefore I shall rank the Rotula with these other two Bones.

Tibia, (*ὑποκνήμιον, ἀντικνήμιον, Focile majus, Arundo major, Canna major, Canna domestica Cruris*) so called from its Resemblance to an old Musical Pipe or Flute, is the long thick triangular Bone, situated at the anterior internal Part of the Leg, and continued in near a straight Line from the Thigh-bone, to support the whole superior Fabric.

The superior Extremity of the Tibia is large, bulbous, and spongy; and is divided into two Cavities by a rough irregular Protuberance, (*Διὰ τὴν σφαιρὴν καὶ ἄσχητον ἐκτατάδα, Tuber, Tuberculum*) which again is hollow at its most prominent Part, as well as at its posterior and anterior Base. The anterior of the two Ligaments; which compose the great cross one, is inserted into the Middle Cavity; and the posterior Depression of this irregular Process receives the posterior Ligament. The two broad Cavities at the Sides of this Protuberance are not equal; for the internal is oblong and deep to receive the internal Condyle of the Thigh-bone, while the external is more superficial and rounder for the external Condyle. In each of these two Cavities in a recent Subject a semilunar Cartilage is placed, the convex Edge of which is thick, and the Cartilage becomes gradually thinner towards the concave or interior Edge. The Middle of each of these Cartilages is broad, and the Extremities turn narrower and thinner, as they approach the middle Protuberance of the Tibia. The thick convex Edge of each Cartilage is connected to the circular Ligament of the Articulation, but so near to its Rise from the Tibia, that the Cartilages are not allowed to change Places far; while the narrow Extremities of these Cartilages, becoming almost Ligaments, are fixed at the Insertion of the strong cross Ligament into the

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Tibia, and seem to have their Substance blended with that Ligament. Therefore a circular Hole must be left between each Cartilage and the Ligament, in which the most prominent convex Part of each Condyle of the Thigh-bone moves. In the Circumference of these Cavities described, the superior Extremity of the Tibia is rough and unequal for the firm Connection of the Ligaments of the Joint. Immediately below the posterior Edge two rough flatten'd Protuberances stand out: Into the internal the Tendon of the Semimembranosus Muscle is inserted; and some Part of the cross Ligament is fixed to the external. On the Outside of this last Tubercle, a smooth slightly-hollowed Surface is formed by the Action of the Popliteus Muscle.

Below the anterior Part of the upper Extremity of the Tibia, a considerable rough Protuberance (*ἀντικνήμιον, Anterior Tuber*) rises, to which the strong tendinous Ligament of the Rotula is fixed. On the internal Side of this, a scabrous Cavity is form'd, where the Semimembranosus, Gracilis, and Sartorius Muscles are inserted: Whence Surgeons know at what Part the Tibia ought to be saw'd through in an Amputation, so as not to have too long and troublesome a Stump, and at the same time to preserve the Motions of the Leg, by saving the proper moving Muscles. Below the external Edge of this superior Extremity, a circular flat Surface, cover'd, in a recent Subject, with a Cartilage, is found for the Articulation of the Fibula: Between which, and the anterior Knob, is a rough Hollow, from which the Tibialis anticus, and Extensor Digitorum longus, take their Origin. From the smooth flat Surface, a Ridge runs obliquely downwards and inwards, to give Rise to the Tibialis posticus. At the Inside of this Ridge, an oblique plain Surface is left, where the Musculus Popliteus is inserted, and Part of the Solæus has its Origin. The remaining Body of the Tibia is triangular, the anterior Angle of which is very sharp, and is commonly called the Spine or Shin (*ἀκράνθα, Spina, Crea, Linea prima Tibiæ, Angulus acutus*). This Ridge is not strait, but turns first inwards, then out, and, lastly, in again. The plain internal Side is smooth and equal, being little subjected to the Actions of Muscles; but the external Side is hollowed above by the Tibialis anticus, and below by the Extensor Digitorum longus, and Extensor Pollicis longus. The two Angles behind these Sides are rounded by the Action of the Muscles; and the posterior Side, comprehended between them, is not so broad as those already mentioned; but is more oblique and flatten'd by the Action of the Tibialis posticus, and Flexor Digitorum longus. Some Way above the Middle of the Bone, the internal Angle terminates, and the Bone is made round, but rough, by the Pressure of the Musculus Solæus. Near to this, the Passage of the medullary Vessels is seen slanting obliquely downwards in the posterior plain Surface.

The inferior Extremity of the Tibia is made hollow, but so as a small Protuberance rises in the Middle. The internal Side of this Cavity, which is smooth, and in a recent Subject is cover'd with a Cartilage, is produced into a considerable Process, commonly named *Malleolus internus*, (*σφραῖν, σφραῖον, Talus, Clavicula, Cavilla interior, Cavilla domestica*) whose Extremity is divided by a Notch, and from it Ligaments are sent out to the Foot. We ought to observe here with Winslow, (*Exposition anatomique des Os secs, § 865.*) that this internal Malleolus is situated more forwards than the internal Condyle of the superior Extremity of this Bone, which is necessary to be remark'd in reducing a Fracture of the Leg. The external Side of this Extremity has a rough, irregular, semilunar Cavity form'd in it, for receiving the inferior Extremity of the Fibula. The posterior Side has two lateral Grooves, and a small middle Protuberance. In the internal Depression, the Tendon of the *Musculus tibialis posticus* is lodg'd; and in the external, the Tendon of the *Flexor longus Digitorum* plays. From the middle Protuberance, ligamentous Sneaths go out for tying down these Tendons.

The Articulations and Motions of the Tibia shall be explained, after all the three Bones of the Leg are described.

The two Extremities of the Tibia are Cartilages at the Birth, and become afterwards Epiphyses.

Fibula (*παραινέμιον, Perone, Focile minus, Arundo minor, Canna minor Cruris, Sura, Radius*) is the small long Bone, placed on the Outside of the Leg, opposite to the external Angle of the Tibia; the Shape of it is irregularly triangular.

The superior Head of the Fibula has a superficial circular Cavity form'd on its Inside, which, in a recent Subject, is covered with a Cartilage, but so closely connected to the Tibia by Ligaments, as to allow only a small Motion backwards and forwards. This Head is protuberant and rough on its Outside, where the Musculus Biceps is inserted; and below its internal posterior Side, a Tubercle may be remark'd, which gives Rise to the strong tendinous Part of the Solæus Muscle.

The Body of this Bone is a little crooked inwards and backwards, which Figure is owing to the Actions of the Muscles; but is still increased to a Fault by careless Nurses holding Children by the Legs. The sharpest Angle of the Fibula is anterior; on each Side of which, the Bone is considerably,

but



but unequally depressed, by the Bellies of the several Muscles that rise from, or act upon it; and, in old People, these Muscles make distinct Sinuities for themselves: For the posterior Surface is flatten'd above by the Soleus, and is made hollow below by the Flexor pollicis longus. The external Surface of this Bone is depressed obliquely from above downwards and backwards by the two Peronæi; and the anterior Surface bears the Prints of the Extensor digitorum longus, Nonus Vesalii, and Extensor pollicis longus. From the internal Angle, the strong Ligament is produced to be continued to the Tibia, for the Connection of these two Bones, and Origin of several Muscles. The posterior Surface is the plainest and smoothest: In the Middle of it, the Passage of the medullary Vessels is seen slanting downwards. I have been particular in remarking, with *Havers*, (*Osteolog. nov. Disc. 1.*) the Entry and Direction of these Vessels; because, in several surgical Cases, the Operator had need to take care, that they are not opened very near to the Bone, to occasion an obstinate Hæmorrhage. And then there seems to be some particular Design in contriving these Canals, so that the Os humeri, Tibia, and Fibula, should have them running obliquely down; whereas the Radius, Ulna, and Os femoris, have them slanting upwards, whereby the Arteries and Nerves, which are sent to these three last Bones, must suffer a considerable Reflexion before they come at the Cancelli. The Reason of this Diversity may, perhaps, be, that the Arteries, particularly, which are so small within the Bones, as to have no strong contractile propelling Force in their Coats, and where they are not assisted by the Action of any moving neighbouring Organ, should have, at least in their Passage through the Bone, a favourable Descent for their Liquids; which, it is evident, they will have in the descending oblique Passages form'd for them in the first Class of Bones, which are generally depending; and they will also most frequently acquire the like Advantage in the last-named Bones, because the Hand, in the most natural Posture, is higher than the Elbow; and, when we sit or lie, the inferior Extremity of the Thigh-bone comes to be at least as high raised as the superior. In standing and walking, or when the Arms are moved, the Blood must indeed ascend, as it passes through the Bones of the fore Arm and Thigh; but the Pressure of the Muscles, then in Action, on the Vessels, before they enter the Bones, is sufficient to compensate the Disadvantage of their Course. This Reasoning seems to be still enforced by observing, that this Passage is always in these Bones nearer the superior, than the inferior Extremities.

The inferior Extremity of the Fibula is extended into a spongy oblong Head, on the Inside of which is a convex, irregular, and frequently a scabrous Surface, that is received by the external Hollow of the Tibia, and so firmly join'd to it by a very thin intermediate Cartilage, and strong Ligaments, that it scarce can move. Below this, the Extremity of the Fibula is stretch'd out into a coronoide Process, that is smooth, cover'd with a Cartilage, and contiguous to the Outside of the first Bone of the Foot, the Astragalus, to secure the Articulation on that Side. This Process is named Malleolus externus. This Process being situated farther back than the internal Malleolus, and in an oblique Direction, obliges us naturally to turn the fore Part of the Foot outwards, as is observed by *Winflow* (*Memoires de l'Acad. des Sciences*, 1722.). At its inferior internal Part, a spongy Cavity for mucilaginous Glands may be remark'd; from its Point Ligaments go out to the Foot, and on the back Part of it is a Sinuosity, made by the Tendons of the Peronæi Muscles.

The Conjunction of the superior Extremity with the Tibia is by Arthrodia; and, at the lower End, the Cartilage seems to glew the two Bones together; not, however, so firmly in young People, but that the Motion, at the other Extremity of such a long Radius as the Fibula, is very observable. In old Subjects I often see the two Bones of the Leg grown together at their inferior Extremities.

The principal Use of this Bone is to afford Origin and Insertion to Muscles; the Direction of which may be a little alter'd, on proper Occasions, by its upper Part shuffling backwards and forwards. It likewise helps to make the Articulation of the Foot more secure and firm.

Both Extremities of this Bone are cartilaginous in a ripe Child, and assume the Form of Appendices before they are united to the Body of the Fibula.

Rotula (*ἑπιμυλλε, μυλακεί, κίρχθ, ἐπιγονατὶς, πλανισίδρον, Patella, Mola, Genu, scutiforme Os, cartilaginofum, disciforme, Oculus genu.*) is the small flat Bone situated at the anterior Part of the Joint of the Knee. Its Shape resembles much the Section of a Heart with its Point downwards. The anterior convex Surface of the Rotula is pretty smooth; only several Holes pierce it, into which Fibres of the strong Ligament, that is spread over it, enter. The posterior Surface is smooth, cover'd with a Cartilage, and divided by a middle convex Ridge into two Cavities, of which the external is largest; and both are exactly adapted to the Pulley of the Os femoris. This plain smooth Surface is surrounded by a rough prominent Edge, to

which the circular Ligament adheres: And, below them, the Point of the Bone is scabrous, where the strong tendinous Ligament from the Tubercle of the Tibia is fixed. The superior horizontal Part of this Bone is flatten'd and unequal, where the Tendons of the Extensors of the Leg are inserted.

The Substance of the Rotula is cellular, with very thin external firm Plates; but then these Cellulæ are so small, and such a Quantity of Bone is employ'd in the Formation of this Bone, that scarce any Bone of its Bulk is so strong. Besides, it is all cover'd over with a thick Ligament, (as was observ'd this sort of Bones generally is) to connect its Substance, and is moveable to one Side or other; and, therefore, is sufficiently strong to resist the Actions of the large Muscles, that are inserted into it, or any common external Force applied to it; while a fixed Process, such as the Olecranon, would not have been sufficient to bear the whole Weight of our Bodies falling on it, as frequently happens to this Bone, and must have hinder'd the rotatory Motion of the Leg. Notwithstanding these Precautions to preserve this Bone from such Injuries, yet I have seen such another Case as *Ruyfch* (*Observ. Anat. Chirurg. Obs. 3.*) mentions; that is, a transverse Fracture in this Bone, when, by the Report of the Patient, and People about him, and by the want of Swelling, Discolouring, or other Mark of Bruise or Contusion, it was plain the Bone was broke by the violent Straining and Effort of the Muscles. Though my Patient recovered the Use of the Joint of the Knee, yet I think it reasonable to believe, that this sort of Fracture should be attended with a Difficulty of Motion, after the broken Parts of the Rotula are reunited; because the callous Matter will probably extend itself into the Cavity of the Joint, where it may either grow to some of the Parts; or, at best, it will make such an Inequality on the posterior Surface of this Bone, as will not allow it to perform the necessary Motions on the Condyles of the Femur.

The Articulation of the Rotula with the Os femoris is a plain Ginglymus, and it is connected to the Tibia by a strong Syndesmotis.

At the ordinary Time of Birth, the Rotula is entirely cartilaginous, and scarce assumes a bony Nature so soon as most Epiphyses do.

Now, therefore, that all the Parts of the Joint of the Knee are describ'd, let us examine what are its Motions, and how perform'd. The two principal Motions are Flexion and Extension. In the former of these, the Leg may be brought to a very acute Angle with the Thigh, by the Condyles of the Thigh-bones being round and smoothed so far backwards. In performing this, the Rotula is pulled down by the Tibia. When the Leg is to be extended, the Rotula is drawn upwards, and, consequently, the Tibia forwards, by the Extensor Muscles, which, by means of the protuberant Joint, and this thick Bone, with its Ligament, have, in effect, the Chord with which they act, fixed to the Tibia, at a considerable Angle; therefore act with Advantage; but are restrain'd from pulling the Leg farther than to a straight Line with the Thigh, by the posterior cross Ligament, that the Body might be supported by a firm perpendicular Column: For, at this time, the Thigh and Leg are as little moveable as if they were one continued Bone. But when the Joint is a little bended, the Rotula is not tightly braced, and the posterior Ligament is relaxed. Therefore, considering the superficial Cavities of the Tibia, this Bone may be mov'd a little to either Side, or with a small Rotation; which, *Winflow* (*Exposition Anatomique du Corps humain, Traite des Os fers*, § 976.) justly remarks, is done by the Motion of the external Cavity backwards and forwards on the internal, which serves as a sort of Axis. Seeing then one Part of the cross Ligament is situated perpendicularly, and the posterior Part is stretch'd obliquely from the internal Condyle of the Thigh outwards, that posterior Part of the cross Ligament will prevent the Leg's being turn'd at all inwards; but it could not hinder it from turning outwards almost round, was not that Motion confin'd by the lateral Ligaments of this Joint, which can yield no great Way. This Rotation of the Leg outwards, is of good Advantage to us in crossing our Legs on several necessary Occasions; though it is altogether fit this Motion should not be very large, lest Luxations should frequently have happen'd here. While all these Motions are performing, the only Part of the Tibia, that moves immediately on the Condyles, is only so much as is within the cartilaginous Rings, which, by their Thickness on their Outfides, make the Cavities of the Tibia more horizontal, by raising their external Side, where the Surface of the Tibia slants downwards. By this means, the Motions of the Joint are more equal and steady than otherwise they would have been. The Cartilages being capable of changing a little their Situation, fits them for doing this good Office in the different Motions and Postures of the Member, and likewise contributes to make the Motions larger and quicker.

The Foot is divided, as well as the Hand, into three Parts, that is, Tarsus, Metatarsus, and Toes; in the Description of which, the several Surfaces shall be named according to the natural Situation, that is, the Broad of the Foot superior, the



Sole inferior; the Side of the Great Toe internal, the Little Toe external.

The Tarsus (*Raffeta*) consists of seven spongy Bones; of which the Astragalus is the superior, the Os calcis posterior; the Os naviculare in the Middle, the Os Cuboides the external of the four anterior; Os Cuneiforme externum, medium, and internum, follow in reckoning inwards. That the Description of these Bones may not be swell'd with Repetitions, I desire, once for all, to observe, that where-ever a rough Ridge is mention'd, without a particular Use assign'd, a Ligament is understood to be fix'd to it; or where-ever a spongy rough Cavity, Depression, or Fossa, is remark'd, without naming its Use, a Ligament is inserted, and mucilaginous Glands are lodg'd; for such will occur in the Detail of each of these Bodies.

The Astragalus is already describ'd under the Article of its Name.

The Calcaneum, Os Calcis, *πτέρνα*, Calcar Pedis, is the largest Bone of the seven, situated at the inferior and posterior Part of the Tarsus. See CALCANEUM.

Os naviculare, (*σκαροειδής*, *Os cymbæ*) situated immediately before the Astragalus, is somewhat circular. Its posterior Surface is form'd into an oblong Concavity, for receiving the round anterior Head of the Astragalus. On the superior Surface is a rough Fossa. Below, the Os naviculare is very unequal and rough, but hollow, for the Safety of the Muscles. On its Inside is a pretty large rising Knob, from which the Abductor pollicis takes in part its Origin, and the Tendon of the Tibialis pollicis is inserted into it: And to it two remarkable Ligaments are fix'd; the first is the strong one formerly mentioned, which supports the Astragalus; the second is stretch'd from this Bone obliquely cross the Foot, to the metatarsal Bones of the middle Toe, and of the Toe next to the little one. On the Outside of the Os naviculare is a semicircular smooth Surface, where it is joined to the Os cuboides. The anterior Surface of this Bone is all cover'd with a Cartilage, and divided into three smooth Plains, fitted to the three Ossa cuneiformia.

The Os naviculare is wholly Cartilage in a new-born Infant.

Os Cuboides (*πολύμορφον*, *cubiforme*, *quadratum*, *grandinosum varium*, *Tessera*, *multiforme*) is a very irregular Cube, situated immediately before the Os calcis. The posterior Surface is an oblong unequal Concavity, adapted to the anterior Part of the Os calcis. On the internal Side of this Bone, a very small semicircular smooth Cavity is form'd, to join the Os naviculare; immediately before which, an oblong smooth Plain is made by the Os cuneiforme externum; and, below this, the Bone is hollow and rough. On the internal Side of the inferior Surface, a round Protuberance and Fossa are found, where the Abductor pollicis has its Origin. On the external Side of this same Surface is a round Knob, cover'd with a Cartilage; immediately before which, a smooth Fossa may be observ'd, in which the Tendon of the Peronæus primus runs obliquely cross the Foot; and, on the Knob, the thin flat Cartilage, proper to this Muscle, plays; in place of which sometimes a Bone is found: More externally than the Knob, a rough Hollow is made, for the strong Ligament stretch'd betwixt this Bone and the Os calcis. The anterior Surface of the Os cuboides is flat, smooth, and slightly divided into two Plains, for sustaining the Os metatarsi of the Little Toe, and of the Toe next to it.

The Ossification of this Bone is scarce begun at the Birth.

The Os cuneiforme externum, (*Chalcoidium externum*) is much of the Shape of a Wedge, being broad and flat above, with long Sides running obliquely down, and terminating in a sharp Edge. The superior Surface of this Bone is an oblong Square: The posterior is a smooth Triangle, which is not complete at the inferior Angle, and is joined to the Os naviculare. The external Side is divided, as it were, by a Diagonal; the superior posterior Half of which is smooth, for its Conjunction with the Os cuboides; and the other is a scabrous Hollow. In the superior anterior Angle of this Surface, a small smooth Impression is made by the Os metatarsi of the Toe next the little one. The internal Side of this Bone has both the anterior and posterior Edges made flat and smooth, the first by the Os metatarsi of the Toe next the great one, and the last by the Os cuneiforme medium. The anterior Surface is exactly an oblong Triangle, for sustaining the Os metatarsi of the middle Toe.

Os cuneiforme medium, or minimum, is still more exactly the Shape of a Wedge than the former. Its internal Side has a flat smooth Surface above and behind, for its Conjunction with the following Bone; with a small rough Fossa below; and a considerable Share of it is rough and hollow. The external Side is smooth, and a little hollowed, where it is contiguous to the last described Bone. Both anterior and posterior Surfaces are flat, smooth, and triangular, for its Articulation with the Os naviculare behind, and with the Os metatarsi of the Toe next the great one before.

Os cuneiforme maximum, or internum, differs from the two former in its Situation, which is more oblique. Besides,

the broad thick Part is placed below, and the small thin Point above and outwards; while the inferior broad Surface is concave, for allowing a safe Passage to the Flexors of the great Toe. The posterior Surface of this Os cuneiforme is hollow, smooth, and of a circular Figure below, but pointed above. The external Side is also smooth and flat, but divided into two, whose Direction is near at right Angles with each other. With the posterior, that runs obliquely from below forwards and upwards, the Os cuneiforme minimum is joined; and, with the anterior, whose Direction is longitudinal, the Os metatarsi of the Toe next the great one is connected. The anterior Surface of this Bone is semilunar, but flat and smooth, for sustaining the Os metatarsi of the great Toe. The internal Side is scabrous, with two remarkable Tubercles below, from which the Musculus abductor pollicis rises; and the Tibialis anticus is inserted into its superior Part.

The three cuneiform Bones are all in a cartilaginous State in a Fœtus of nine Months.

These seven Bones of the Tarsus, when conjoin'd, are convex above, and leave a Concavity below, for lodging safely the several Muscles, Tendons, and Vessels, that lie in the Sole of the Foot, and are, in the same manner as those of the Carpus, all (except some few Parts mention'd in their particular Descriptions) cover'd over with strong Ligaments, that, by entering the Holes on their Surface, adhere firmly to them; and therefore so tightly connect them to each other, that, notwithstanding the many smooth Surfaces they have all cover'd with Cartilage, and some of them of the same Shape as if design'd for a very moveable Articulation, no more Motion is here allow'd, than only to prevent too great a Shock of the Fabric of the Body in walking, leaping, &c. by falling on too solid a Base; which, if it was one continued Bone, would likewise be much more liable to be broke; and to make our Foot accommodate itself to the Surfaces we tread on, by becoming more or less hollow, or by raising either Side. When the Ligaments are too weak, as in some morbid Cases, a very evident Motion of the Os naviculare on the Astragalus may be observed.

Metatarsus (*συνδῆμα*, *πῆδιον*, *Planta*, *Planum*, *Vestigium*, *Solium*, *Pectus*, *Præcordium*, *Pectusculum*) is composed of five Bones, which, in their general Characters, agree with the metacarpal Bones, but may be distinguished from them by the following Marks: 1. They are longer, thicker, and stronger. 2. Their anterior round Extremities are not so broad, and are less in proportion to their Bases. 3. Their Bodies are sharper above, and flatter on the Sides, with their inferior Ridge inclin'd more to the Outside. 4. The Tubercles at the inferior Roots of the round Heads are larger.

The first, or internal metatarsal Bone, is easily distinguished from the rest by its Thickness. The one next to it is the longest, and with its sharp Edges almost perpendicular; and the others are shorter and more oblique, as their Situation is more external: Which general Remarks, with the Description I am now to give of each, may learn us to distinguish what Bone, and of which Foot, any one is, that can be offered to our Examination.

Os metatarsi pollicis is by far the thickest and strongest, as having much the greatest Weight to sustain. Its Base is oblong, irregularly concave, and of a semilunar Figure, to be adapted to the Os cuneiforme maximum. The inferior Edge of this Base is a little prominent and rough, where the Tendon of the Peronæus primus Muscle is inserted. On its Outside, an oblique circular Depression is made by the following Bone. Its round Head has generally on its fore Part a middle Ridge, and two oblong Cavities, for the Ossa sesamoidea; and, on the external Side, a Depression is made by the following Bone.

Os metatarsi of the second Toe is the longest of the five, with a triangular Base, supported by the Os cuneiforme medium, and the external Side produced into a Process, whose Extremity is an oblique smooth Plain, to be joined to the Os cuneiforme externum. Near the internal Edge of the Base, this Bone has two small Depressions, made by the Os cuneiforme maximum, between which is a rough Cavity. Farther forwards we may observe a smooth Protuberance, which is join'd to the foregoing Bone. On the Outside of the Base are two oblong smooth Surfaces, for its Articulation with the following Bone; the superior smooth Surface being extended longitudinally, and the inferior perpendicularly; between which is a rough Fossa.

Os metatarsi of the middle Toe is the second in Length. Its Base, supported by the Os cuneiforme externum, is triangular, but slanting outwards, where it ends in a sharp-pointed little Process; and the inferior Angle is not completed.

The internal Side of this Base is adapted to the preceding Bone; and the external Side has also two smooth Surfaces cover'd with Cartilage, but of a different Figure; for the superior is concave, and, being round behind, turns smaller as it advances forwards; and the little inferior smooth Surface is convex, and very near the Edge of the Base.

Os metatarsi of the fourth Toe is near as long as the former, with a triangular slanting Base joined to the Os cuboides, and



and made round at its external Angle, with one hollow smooth Surface on the Outside, where it is pressed on by the following Bone, and with two on the internal Side, corresponding to the former Bone; behind which, is a long narrow Surface impressed by the Os cuneiforme externum.

Os metatarsi of the little Toe is the shortest; situated with its two flat Sides above and below, and with the Ridges laterally. The Base of it, Part of which rests on the Os cuboides, is very large, tuberos, and produced into a long pointed Process externally; whence Part of the Abductor minimi digiti has its Origin; and, into its superior Part, the Peronæus secundus is inserted. Its Inside has a flat conoidal Surface, where it is adjoining to the preceding Bone.

When we stand, the anterior Extremities of these metatarsal Bones, and the Os calcis, are our only Supporters, and therefore it is necessary they should be strong, and have a confin'd Motion, as indeed we see they have.

The Bones of the Toes are much of kin to those of the Thumb and Fingers, particularly the two of the great Toe are precisely form'd as the two last of the Thumb; only their Position, in respect of the other Toes, is not oblique; and they are proportionally much stronger, because they are subjected to a greater Force; for on those principally the Weight of the Body is supported, when we are raised on our Tip-toes.

The three Bones in each of the other four differ from those of the Fingers, in these Particulars: They are less, and smaller in proportion to their Lengths: Their Bases are much larger than the anterior Extremity: Their Bodies are sharper above and below, and flatter on the Sides: The first Phalanx is proportionally much longer than the second and third, which are very short.

Of the four, the Toe, next the great one, has the largest Bones in all Dimensions, and more externally the Toes are less. The little Toe, and frequently that next to it, have the second and third Bones intimately united into one, which may be owing to their little Motion, and the great Pressure they are subjected to.

The Toes are of good Use to us in Walking, by serving as Supporters to the Foot behind, when the Sole is raised, in order to bring our Body, with its Centre of Gravity, perpendicular to the advanced Foot.

The Bones of the Metatarsus and Toes are in the same Condition, in Children, as those of the Metacarpus and Fingers.

The only Bones, now remaining to complete the Description of the Skeleton, are the small ones, which are found in the Hand, Foot, and some other Parts.

Ossa sesamoidea are the little Bones most frequently found at the Articulations of the Toes and Fingers, which, tho' generally said to resemble the Seed of the Sesamum, are of very different Figures and Magnitudes. After the Dissection of several of them in recent Subjects, they seem to me nothing else than the Ligaments of the Articulations, or the firm Tendons of strong Muscles, or both, become bony by the violent Compression they suffer in the Situation they are. Thus the sesamoide Bones, at the Beginning of the Gastrocnemii Muscles, are evidently composed of the tendinous Fibres only. These, at the first Joint of the great Toe, are as plainly the same continued Substance with the Ligaments and Tendons of the Abductor, Flexor brevis, and Adductor; and that, which is sometimes double at the second Joint of that Toe, is Part of the circular Ligament; and, indeed, if it was worth while to enumerate all of them, that are at any time found, we should observe the Whole of them form'd in this Manner. Their Number, Figure, Situation, and Magnitude, are so uncertain, that it were in vain to insist on the Differences of each; and, therefore, I shall only in general remark,

1. That, where-ever the Tendons and Ligaments are firmest, the Actions of the Muscles strongest, and Compression greatest, there such Bones will be most probably found.

2. That, *ceteris paribus*, the older the Subject is, in which they are sought, their Number will be greater, and Size bigger.

3. The more Labour of either or both Extremities any Person is enured to, he will, *ceteris paribus*, have the most numerous and largest Ossa sesamoidea.

However, as the two at the first Joint of the great Toe are much larger than any other, and are seldom wanting in an Adult, we may judge, that, besides the more forcible Cause of their Formation, there should also be some particular Advantage necessary at this Place, rather than elsewhere; which may possibly be, to allow the Flexor Muscles to send their Tendons along this Joint, secure from Compression, in the Hollow between the two oblong sesamoide Bones, while, by removing these Tendons from the Centre of Motion, and giving them the Advantage of an Angle at their Insertion, the Force of the Muscles is increased; and therefore the great superincumbent Weight of our Body, in Progression, is more easily raised.

For the Arteries of the inferior Extremities, see ARTERIA.

For the Veins of the inferior Extremities, see VENA.

For the Nerves of the inferior Extremities, see NERVUS.

The Muscles of the lower Extremities are, first, those which move the Os Femoris upon the Pelvis.

These Muscles are commonly twenty-two in Number, sixteen of which are inserted in the Os Femoris, and six move it, without being fix'd to it.

Those Muscles only, which are inserted in the Os Femoris, are reckon'd to belong to the Thigh, and they are commonly said to be fourteen in Number; but it is easy to make out sixteen very distinct from each other. Of these sixteen, three lie on the fore and upper Part of the Thigh. They are the,

1. Psoas.
2. Iliacus.
3. Pectineus.

On the Inside of the Thigh are three, commonly reckon'd one, by the Name of *Triceps*; tho', according to the antient Language, it has three Tails, as well as three Heads, and three Bellies, and therefore might more properly be call'd Triplex.

4. Triceps five Triplex primus.

5. Triceps secundus.

6. Triceps tertius.

Three form the Buttocks, and are call'd,

7. Glutæus Maximus.

8. Glutæus Medius.

9. Glutæus Minimus.

There are six very small Muscles, more or less, hid under the Glutæi; the four first of which are by some term'd *Quadrigenini*. The particular Names of these six are,

10. Piriformis.

11. Gemellus superior.

12. Gemellus inferior.

13. Quadratus.

14. Obturator externus.

15. Obturator internus.

Lastly, there is a small anterior superficial Muscle, commonly, but falsely, term'd *Fascia Lata*, which is a large membranous, tendinous, or ligamentary Covering, to which the greatest Part of this small Muscle is fix'd; and, therefore, it ought not to be call'd by the Name of that Membrane without Restriction, that is, without the Addition of *Musculus*, in this Manner:

16. Musculus Fasciæ latæ five musculus Membranofus. See FASCIA.

The six Muscles which move the Os Femoris, without being inserted in it, belong to the Class of those which move the Leg upon the Thigh. They are,

17. Sartorius.

18. Rectus Gracilis.

19. Rectus five Gracilis internus.

20. Semimembranofus.

21. Seminervofus.

22. Portio Bicipitis longa.

All these Muscles, whether inserted or not inserted in the Os Femoris, not only move that Bone on the Pelvis, but may also move the Pelvis on the Os Femoris.

#### *The MUSCLES which move the BONES of the LEG on the OS FEMORIS.*

Ten Muscles are commonly reckon'd to belong to this Articulation. Most of them are very long, and situated lengthwise near each other, quite round the Os Femoris.

1. Rectus anterior five Gracilis anterior.

2. Vastus externus.

3. Vastus internus.

4. Crureus.

5. Sartorius.

6. Gracilis internus five Rectus internus.

7. Biceps.

8. Seminervofus.

9. Semimembranofus.

10. Popliteus.

Of these ten Muscles the Popliteus only is small, and lies, as it were, out of the Rank of the rest, being situated below the Thigh. One Portion of the Biceps is likewise small.

These Muscles not only move the Leg upon the Thigh, but also the Thigh upon the Leg, the Popliteus excepted. Some of them likewise move the Thigh upon the Pelvis, and the Pelvis upon the Thigh; as the Gracilis anterior, Sartorius, Gracilis interior, the great Portion of the Biceps, Seminervofus, and Semimembranofus.

These are not the only Muscles which move the Leg upon the Thigh, and the Thigh upon the Leg. The Gastrocnemii may likewise perform these Motions, tho' commonly confined to the Extension of the Foot.

#### *The MUSCLES which move the TARSUS on the LEG.*

The Motions of the Tarsus are supposed to be perform'd by nine Muscles, situated in the Leg; three on the fore Side, and six on the back Side. They are the;



1. Tibialis Anticus.
2. Peronæus Medius.
3. Peronæus Minimus.
4. 5. Gastrocnemii.
6. Solæus.
7. Tibialis Gracilis vulgo Plantaris.
8. Tibialis Posticus.
9. Peronæus Maximus.

These Muscles, three of which are anterior, and six posterior, not only move the Tarsus on the Leg, but also the Leg on the Tarsus, except the Tibialis Gracilis, or Plantaris. These Motions may likewise be perform'd by four Muscles which belong to the Toes, the Names of which are these :

10. Extensor Pollicis longus.
11. Extensor Digitorum longus.
12. Flexor Pollicis longus.
13. Flexor Digitorum longus.

The Muscles which move the Metatarsus and Toes, are these,

1. Extensor Pollicis longus.
2. Flexor Pollicis longus.
3. Thenar.
4. Antithenar.
5. Extensor Digitorum longus.
6. Extensor Digitorum brevis.
7. Flexor Digitorum brevis five perforatus Pedis.
8. Flexor Digitorum longus five perforans Pedis.
9. Flexor Digitorum accessorius.
10. Lumbricales.
11. Transversalis Digitorum.
12. Interossei.
13. Metatarsus.
14. Parathenar major.
15. Parathenar minor. *Winslow.*

For an Account of the particular Origins and Insertions of the Muscles, see the Articles of their respective Names.

CRUSTA. The Shell of a Lobster, Crab, Crawfish, Shrimp, or Prawn.

It also imports a Scab or Scurf upon a diseased Part, or an Eschar, or a sort of Crust, or Cream, which coagulates on the Superficies of any Liquor, as upon Blood, or Urine, or upon fermentable Liquors, during one Stage of their Fermentation. See ALCOHOL.

CRUSTA LACTEA. See ACHOR.

CRUSTACEA.

*Crustata* and *μαλακόςσκα* are Animals, which have their external Parts firm and hard, but contain a fleshy soft Substance within; or which, being cover'd with slender Crusts or Shells, are destitute of Bones internally, which have their Heads furnish'd with Horns, and other Appendages, which have eight Feet obliquely bended, and two Arms call'd Claws, notch'd like a Forceps. According to Ray, they belong to the Class of the exsanguious, large, cirrated Animals, furnish'd with Feet. Pliny, in the thirty-first Chapter of his ninth Book, comprehends all crustaceous Animals under the Name of Crabs. In this Sentiment he is follow'd by Bodin, in his *Universæ Naturæ Theatrum*. By the celebrated Linnæus, in his *Systema Naturæ*, they are class'd among the Insects without Wings, under the generical Name of Crabs; the characteristic Marks of which are ten Feet, the largest of which are like Claws, two Eyes, and a Tail, as it were, foliated. According to Kleinus's Distribution of Animals, they belong to the Class of Multipeds, or such as have more Feet than four, and constitute a particular Genus of loricated or crustaceous Animals; the several Species of which, used in Medicine, will be specified under their respective Articles.

CRUSTULA. This Word is sometimes used in the same Sense as ECCHYMOSIS, which see.

CRUSTUMINA PYRA. Pears much admired by the Romans. They are mention'd by Columella, L. 5. C. 10. Rhodius, in his Notes on Scribonius Largus, takes it to be the same with that which is now call'd the Bergamotte Pear.

CRUSTUMINATUM, *κρυστινιστον*. A sort of Rob, made of the Juices of Apples or Pears, boil'd up with Rain-water and Honey. Aetius, in *Tetrabib. 2. Serm. 1. C. 138.* directs the Manner of preparing a *Crustuminatium*.

CRUX CERVI. The Bone of a Stag's Heart. *Castellus.*

CRYMODES, *κρυμωδης*, from *κρύει*, Cold. An Epithet for a Fever, wherein the external Parts are cold. Aetius, in *Tetrabib. 2. Serm. 1. C. 89.* mentions such a Fever as an Attendant of an Erysipelas of the Lungs.

CRYOXA, *κρυοξα*. Erotian explains this, a sort of Pot-herb, like Parsley, which grows near the Sea.

CRYPHEMA, *τα κρυπημα*. In Hippocrates, L. Epidem. 7. imports private Sentiments.

CRYPTOS. Occult, or latent.

CRYSORCHIS. A Retraction or Retrocession of one of the Testicles. *Castellus* from Galen, *Definit. Medic.*

CRYSTALLI. Eruptions about the Size of a Lupin,

white and transparent, which sometimes break out all over the Body.

CRYSTALLINÆ MANUS, *κρυστάλλιναι χεῖρες*, in Hippocrates, *Epidem. L. 7.* are hard Hands, so excessively cold as to seem almost frozen.

CRYSTALLINÆ, Crystallines.

These are little Pusles fill'd with Water, or Phlyctænæ, are transparent, resemble Crystal, and, on that account, are call'd Crystallines. They are reckon'd in the Number of the worst Symptoms of a Gonorrhœa. But, as these Bladders are not always full of Water, they are flat, when they are press'd with the Finger, and are always without Pain. The Crystallines are only on the Foreskin; the Parts whereof, on which these Bladders do not appear, being very red, and of a blackish Colour, as all Parts are which have been bruised. This blackish Redness is very different from the Inflammations of the Glans and Foreskin, and therefore does not seem to be the Offspring of the virulent Matter of a Gonorrhœa; and far less can we imagine, that the Bladders and Crystallines are produced by the Sharpness of the Corruption.

On the other hand, by considering the dark Redness so very common in all Contusions, we may naturally conclude, that this Symptom is of the same Sort. On this Supposition of a Bruise, the Bladders will easily become manifest; especially if we consider, how plentifully lymphatic Vessels appear to be bestow'd on that Part. Now a Contusion of such Vessels would certainly hinder the Lymph to flow along them, and the Lymph, thus interrupted, will distend its Vessels in their natural Form, which is the very Figure of the Crystallines; for the Lymphatics are not equal in their Surface, nor conical, nor cylindrical, like the rest of the Vessels; and, tho' they be really Cylinders, they are unequal and knotty, because of the frequent Interruption their Liquor finds from the great Number of their Valves, which occasion them to swell thus unequally, when the Lymph proceeds more slowly in its Course, or endeavours any Return or Reflux, and is the true Cause of the crystal Knots, the Figure of the Crystallines: So the Crystallines may be the Effect of Coition, but are never the Product of Infection received at that time.

The Nature of Crystallines, one sort of the Caries mention'd by Antonius Musa, and call'd *Taroli* by Italian Physicians, being thus explain'd, we are under no Difficulty in laying down the Indications of their Cure; especially if we consider, that they are the Effect of a Bruise, on a Part subject to a great Afflux of Humours, and to a Gangrene: On which account the Applications must be so temper'd, as to be styptical and astringent, to contract the Bladders, without any Danger of condensing the Liquors of the bruised Part, which might occasion a Gangrene; or else, astringent Applications must be so well animated with spirituous Medicines, that all Risque of splitting on the same Rock may be avoided.

A Practice of this Kind, always succeeding in Experience, is a strong Confirmation of the Theory that was establish'd: For, by it, Crystallines are not a Symptom of the Gonorrhœa, but a genuine Effect of Coition, more especially in the Circumstances there mention'd. On the other hand, Methods of any other Kind either do not succeed, or after a very long time. Mr. Blegny's Experience agrees perfectly with this Doctrine. "Those watry Tumors, says he, being usually accompany'd with other grievous Circumstances, some Authors have consider'd them as Symptoms of a Pox, and sometimes taken them for the Pox itself; and therefore have endeavoured to cure them by directing Purgatives, Sudorifics, and the most violent Diuretics, the Fumes of Cinnabar, the Applications of Plaisters and Ointments prepared with Mercury; and, in a Word, by all the general Remedies employ'd for the Cure of a Pox. But in this they are grossly mistaken; for those watry Tumors have no Dependence upon a Pox; and it is very certain, that the general Medicines, employ'd in the Cure of it, do not effectuate the Cure in so short a time as is necessary for the Cure of watry Tumors, which are always so urgent, that they come to their Height in three or four Days, if they be not check'd by topic Remedies."

This was proper to be shewn, from one of the best Books we have on these Subjects, first, That I might not appear altogether singular in an Opinion, which may seem strange to most Physicians. Then, secondly, Because they may rather embrace it on the Authority of a dead and foreign Practitioner, than from any living Author; howsoever this Opinion be supported on Experience, and the best Reason. But Monsieur Blegny, not taking his Indications from the Nature of Crystallines, but the Appearance of their Water, falls into as great, tho' not so pernicious Mistakes, as some other Authors; and fancies, that the Water of the Bladders may be carry'd off, as is commonly said, by Medicines that purge Water; and he still bears so great a Tendernefs for the Specifics of the Pox, that he would have them mix'd with some he recommends for Venereal Ulcers and Chancres; but withal, that none of these ought to hinder our using proper Topics: "Which, he says, are so much the more necessary, that they only are so successfully



“cessfully employ'd in curing some Patients, that, without them, internal Remedies would prove ineffectual.” Now, as these Topics are so necessary, that all internal Medicines will prove ineffectual in curing Crystallines without them, and as he uses purging Medicines only with a View to discharge the Water, which they cannot do; so we may safely conclude, that Mr. *Blegny* has not made a right Use of his Experience, and that Crystallines are cured only by topical Medicines, without having any regard to a Gonorrhœa, a Chancre, or any other of their Symptoms.

Tho' Crystallines have been commonly reckon'd among the most terrible Symptoms of a Gonorrhœa; and tho' neither the Notion, nor Experience, I have of its Cure, can induce me to that Persuasion, I hope the Practice of other Authors, which confirms this my Opinion, rather than overturns it, sufficiently warrants the Liberty I have taken to differ from them. And, therefore, that Means, proper to cure this Symptom, may not be wanting, however different our Opinions are about its Nature, we find the following Method principally recommended.

*Musitanus* thinks the Spirit of Tobacco the only Medicine sufficient against this great Evil, which he thus prepares:

Take of the green Leaves of Tobacco, as much as you please: Infuse them in Malmsey-wine. The Tincture is used without Distillation.

The Crystallines are to be touch'd with this Tincture five times at most, after it is first humbled with sublimate or precipitated Mercury. This is to be done when the Patient is lying, lest the Violence of the Pain, because of the violent Operation of the Tincture, should make him drop down in Convulsions.

If this Symptom was near as fatal as this Author pronounces it, or if it was attended with such dreadful Consequences in its only Cure, it ought deservedly to be reckon'd the most terrible Symptom of the Gonorrhœa, or of the Pox.

But Monsieur *de Blegny*, and most Practitioners, do not find the Crystallines so dangerous a Symptom, or to require so violent a Remedy, tho' he be led away with greater Apprehensions of Danger than ever he observed, and had Occasion to fear; for he finds, that drying and discussing Medicines are a sufficient Cure of Crystallines, and give Forms accordingly of camphorated Spirit of Wine, making a Paste with Bean-flower, Lime-water, and Sal Ammoniac; and even comes to astringent Medicines, as Whites of Eggs, with Alum, mix'd with sympathetic Powder.

But, as I have already observed, the Bruise requiring warm Medicines, in order to discuss the Liquors, or to make them flow, suffers very much by indiscreet Applications of astringent and drying Medicines, made for wasting the Liquor of the Crystallines; whereby a Gangrene often ensues, as would be the Consequence of all other considerable Bruises, that are treated with these like Medicines. And, therefore, the Applications ought rather to have the greatest View to the Contusion, and may carry some Degree of Astringency with them; as,

Take of Lime-water, three Ounces; and Spirit of Wine, two Ounces: Bathe the affected Part with this, when warm, four or five times a Day.

Take of the Leaves of Wormwood, one Handful; of the Flowers of Chamomile and Elder, of each half a Handful. Boil them, in a Pint and a half of Lime-water, to the Consumption of a third Part; and to the Liquor, strain'd and press'd out, add six Ounces of Spirit of Wine.

When no further Apprehensions remain from the bruised Part, the former Medicines may be made more astringent, with some Roman Vitriol dissolved in them, or some *Aqua Opthalmica Sapphirina*; which will perfect the Cure, without any Preparation of Mercury, or administering any sort of inward Medicines.

But as neither the Spirit of Tobacco, nor the most powerful and effectual of the other Medicines, can be said to destroy the Venereal Contagion, while they cure Crystallines, there is not sufficient Experience for asserting their being occasioned by it, since neither their Nature nor Cure give any Proof of it. And, therefore, the former Doctrine, that Crystallines are rather the Effect of Coition than of Contagion, is plain from both Experience and Reason. No doubt they may be together; but, in that Case, neither of them is the Cause of the other. *Cockburn*.

**CRYSTALLINUS HUMOR.** The Crystalline Humour of the Eye. See *Oculus*.

**CRYSTALLION**, in *Oribasius, Med. Collect. Lib. 12.* is a Name for the *PSYLLIUM*. *Fleawort*.

**CRYSTALLIZATIO.**

Crystallization is that particular Operation, by which the solid

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Parts, which, in any Fluid, are highly attenuated, extended, or disengaged, are reduced to a Body which is dry, hard, compact, diaphanous, or at least semidiaphanous, and either foliaceous, or of some geometrical Figure, such as cubical, prismatical, or conical. This Description comprehends not only the Crystallizations of Salts, and saline Corpuscles, such as those used in Laboratories and Shops, but also of earthy Bodies. That these last are capable of being crystalliz'd, is obvious from the Experiment the learned *Henkelius* made on recent Urine, discharged in the Morning, by a young Man, who drank only Beer; for after this Fluid had stood unmoved for four Years, in a moderately warm Place, and in a pretty large Cucurbit, which had a long Neck, a narrow Mouth, stop'd with a Cork, and covered with a Bladder, and was half full, besides the small pinguious Drops adhering to the Neck, which were Marks of a volatile Salt, and the whitish-yellow Earth in the Bottom, which is common to Urine, it deposited, first, a conspicuous white Earth, which gently adhered to the superior Part of the Belly of the Cucurbit; and, secondly, especially near the Surface of the Liquor, by the Sides of the Glass, all around, were oblong prismatical Crystals, as large as a Grain of excocticated Oats, running unequally into Points at both Extremities; not saline, but of a stony Consistence; void both of Taste and Smell; semidiaphanous; crackling betwixt the Teeth, like the Selenites; combustible; indissoluble in boiling Water, and incapable of Fusion by the Fire.

The Crystallization of Salts and saline Bodies is performed, when a Liquor, which is generally aqueous, and contains a Salt dissolved in it, is filtrated, and, when thus depurated, inspissated by a slow and continu'd Evaporation, till a Pellicle appears on the Surface, which is the first Beginning, as it were, of the Crystallization. The Evaporation is generally thought to be completed, when a Drop of the Solution, poured upon the Nail of the Finger, or any cold Substance, is forthwith concreted into a Salt. The Evaporation may be either performed by the Fire, or by the Heat of the Sun; in which last Manner Sea Salt is better crystalliz'd than any other. The Evaporation ought to be made in large-mouth'd Vessels, the best of which are Glass; next to these are Earthen Pots, well bak'd, and such as will not suffer the Salts to pass through the Pores; but those made of Metal are corroded by the Salts, and subject to be spoil'd by the Rust. The inspissated Liquor is lodg'd in some cool Place, and kept in Vessels of Glass or Wood, or in Earthen Vessels, well bak'd, and whose Mouths must be considerably large, that the crystalliz'd Substance may be the more commodiously taken out. Some time after, the latent Particles of Salt, dispersed through the Liquor, are approximated, and joined to each other, and, at the Sides or Bottom of the Vessel, form saline Crystals, which are greater or smaller according to the Quantity of the Solution. In either Case all the Crystals are not equally large, but are endow'd with the Figure peculiar to each Salt, single, beautifully shining, and the more elegant and large, the more slowly the Evaporation has been made. But the whole saline Substance is not found form'd into Crystals, but there is a large Number of irregular Concretions, especially in that Base in which the larger Crystals are planted, and which seems to be, as it were, the Matrix from which these Crystals arise. Nor is all the dissolved Salt, which was in the Liquor, form'd into Crystals, but a Quantity of it remains, sufficient to saturate the Fluid. Hence, when the Crystals form'd are taken out, there is a Necessity for a new Evaporation, and the Liquor must be lodged in a cool Place, in order to obtain more Crystals; and these Measures are to be repeated, till no more Crystal can possibly be form'd. But since, for the Purposes of Crystallization, some Quantity of a Fluid is always required, the Salt cannot possibly be totally extracted from the Liquor by Crystallization, but Exsiccation becomes necessary for drawing off the Remainder. Sometimes, in order to obtain the more elegant Crystals, Twigs are put into the Vessel, or Threads are stretched in it as proper Supports, to which they may adhere, as is usual in collecting the Crystals of Alum, Copper, and Sugar. The collected Crystals are in the Shops dry'd on coarse Paper, by the Heat of the Sun. These, however carefully they may be freed from the Humidity adhering to their Surfaces, scarce afford so genuine a Salt, but that it contains some Mixture of Earth and Water. This supplies the Place of a Glue or Calx, for uniting, as it were, the saline Crystals; for it is dissolv'd when the Water is expel'd, or by Calcination, as we may observe in decrepitated Sea Salt, Alum, and Vitriol, calcin'd. Some Salts undergo a better and more perfect Crystallization, when, to their Solution, a calcareous Earth is added, as is proved by *Geoffroy*, in the Instance of Borax. Those Salts, to which an Oil adheres, are unfit for Crystallization, and proportionably more so according to its Quantity; because the Oil, interposed between the small Portions of Matter, by its Tenacity prevents the Union of the similar Particles; and if, in some measure, they should happen to unite, yet they never acquire a due Degree of Solidity, but are forthwith melted down, on the Access or Contact of a moist Air. Hence the Salters of Herrings



Herrings take care, that in boiling no Fat be mixed with the salt Water; and skilful Chymists, when they suspect an Admixture of oleous and pinguious Parts, after a proper Evaporation, pour Spirit of Wine upon it, which dissolves the oleous Parts, receives them, as it were, into its Bosom, and so separates them from the saline, by which means they facilitate the Concretion of the Crystals. This Observation is of singular Use to Physicians, with respect to the Formation of Stones in the animal Body; and points out the most effectual Remedies, by which their Concretion may be prevented. Hence we learn, that Salts, divested of all pinguious Parts, are most easily crystalliz'd. The white Colour of the saline Crystals is somewhat darken'd by the adhering Oil. This Colour is also variegated by metalline Particles, almost infinitely divided, and combin'd with their solvent Salt, as appears in the bluish Vitriol of Copper, and the green Vitriol of Iron, which consist of a Metal which is kept dissolv'd by an acid Salt, and a little pure Water.

The Use of saline Crystallizations is,

First, To separate Salts, in a dry Form, from their solvent Liquor.

Secondly, To depurate Salts; for the Water, leaving the Sordes, retains the Salts; for which Reason, the better these are depurated, the more elegant Crystals they yield in Crystallization.

The Aetiology of these Crystallizations is obvious, if we consider, that, in order to their Production, there is requisite, first, Too small a Quantity of Water to keep them dissolv'd; secondly, The Rest of the particular Liquor in which the dissolved Salt is lodg'd; and, thirdly, Cold; for, when the solvent Menstruum begins to prove defective, a slender Pellicle is form'd on the Surface of the saline Parts, which can no longer be kept in a State of Solution by the Liquor. Then this Pellicle becomes gradually thicker, till at last becoming specifically heavier than the rest of the Solution, it is broken into different Parts, subsides, and forms itself into Molecules, or Crystals, of different Bulks; which could not be produced, unless the Liquor was in a State of Rest, because then the Principle of Solution, which is Motion, proving defective, nothing hinders the mutual Approach of the saline Parts to each other; for, as the Want or Defect of Humidity brings the Parts nearer to each other, it consequently lays a Foundation for their Union. Thus the Diminution of Motion renders the Fluid unfit for separating the Parts, when they happen to adhere. But, when Liquors are compressed by the cold Air, many of the Particles flying off from the solvent Liquor, the contain'd saline Parts are, by the Constriction, more and more expel'd, and thrown out from the Pores of the fluid Mass; and the more intense the Cold is, the larger Crystals are form'd; but these are continually mov'd upon the Accession of Heat. Hence it happens, that, in a warm Air, very small Crystals are generally formed. Crystallization is, therefore, perform'd, when a sufficient Quantity of Moisture, Motion, and Heat, which are the Causes of the Solution, prove defective. Crystallizations, indeed, of Salts happen, when their highly saturated and warm Solutions are left to themselves; in which manner volatile Salts, such as that of Hartshorn, Vipers, and Silk, and others obtain'd from the Animal Kingdom, are crystalliz'd. But these are very near to a State of Crystallization; for the Evaporation is perform'd with this Design, that the Solution, which remains after the Diminution of the Liquor, may become more saturated. But, even in a highly saturated Solution, a very small Quantity of Crystals are form'd, without a previous Evaporation. 'Tis therefore obvious, that Evaporation, that is, a Diminution of the solvent Liquor, is absolutely necessary to the Crystallization of any Salt. Hence also 'tis obvious, why in a Receiver, from which the Air is extracted, as also in a close-stopt Vessel, Crystals are not form'd; because, in these Cases, a very small Evaporation, or none at all, is made. We must carefully consider, that the Crystals of Salts, peculiar to each Species, are not obtain'd by every Kind of Concretion; for when the Solution of any Salt, sufficiently warm, is suddenly cool'd, when, for Instance, the Vessel containing it is put in cold Water, the dissolved Salt, lodged in the Liquor, is precipitated to the Bottom, in the Form of a Powder; for then the Solution is, with a kind of Impetus, condens'd, and forc'd too precipitately to deposit its Salts. Nor does the Salt acquire its peculiar Figure by a sudden and continu'd Evaporation on the Fire, till the whole Liquor is totally exhal'd, or, at least, rendered thicker than it ought to be; for the Heat, exciting a preternatural Commotion of all the Parts, hinders the saline Parts from receding from each other; but, being forced to run, in all Directions, with a tumultuous Confusion, and being preposterously mixed, they are form'd into less elegant Crystals. As, therefore, a precipitate Refrigeration, so also an intense Heat, hinders Crystallization. The best Evaporation is made without Boiling; and the Place fittest for Refrigeration is that which is of the same Temperature with Cellars about the Months of June and July. But, there are some Salts, which are more commodiously crystalliz'd in a pretty warm Air, such as rich, acid, and alkaline Salts; and, for the Crystallization of Sugar in the

Pans, a pretty brisk Heat is necessary; perhaps because Salts of this Kind require little Moisture for their Solution, and retain it closely, which must be afterwards lessen'd by Evaporation, and a Continuation of the Heat; for it must be observed, that the Salts, which require a large Quantity of Water to keep them dissolved, are first formed into Crystals: On the contrary, the more easily and quickly, and with the smaller Quantity of Water, Salts are dissolved, the more firmly they seem to retain the Water they receive. Salt of Tartar, for Instance, which, of all Salts, requires the smallest Quantity of Water for its Solution. Hence, if different Salts are dissolved in the same Water, some of them will be form'd into Concretions sooner than others, and each of them will be distinguished by the particular Figure of its Crystals. Thus, for Instance, the Crystals of common Salt are quadrilateral Pyramids, with a square Base: Those of Sugar are oblong, and have rectangular Bases: The hexagonal Crystals, arising in Alum, have also hexagonal Bases: The Crystals of Vitriols, for the most part, resemble Icicles, variously interwoven, and Polygons interposed, or lying between them: Sal Ammoniac elegantly resembles the Branches of a Tree; and Salt of Hartshorn, Arrows plac'd in a Quiver: In the Sal Mirabilis Glauberi, which is made of common Salt and Vitriol, the Figures of both Salts are exhibited: Nitre is formed into prismatical Columns, not unlike Faggots of Wood; and between these are some Figures, sometimes rhomboidal, and sometimes pentagonal, which seem to approach pretty near to common Salts. In the Salt of Tin, small Lines, like Pins, so run out in every Direction from the Centre, as to form a Star, such as that observed in the martial Regulus of Antimony. 'Tis surprising, that the Crystals of the same Salt should be perpetually formed in the same Figure. Willis, in order to account for this Phenomenon, affirms, that the Author of Nature granted such peculiar Modes of Figuration to Salts, as well as other natural Concretions, according to the Prevalence of the Spirit or Salt, and their Commixture with the other Principles. But this is no more than a formal and explicit Declaration, that we are ignorant of the physical Cause of this surprising Appearance. Musschenbroek also denies, that this has hitherto been accounted for by any one, any more than this other Phenomenon, Why green Vitriol and Alum, dissolv'd, and mix'd with Water, return to their own Crystals, and do not become a third Salt of a different Kind. If it should be ask'd, Why, sometimes, the Weight of the Salt, used in the Solution, is diminish'd in the concreted and dry'd Crystals, we answer, with Gualimini, that the Salt is so easily dissolved in the Water, that the aqueous Exhalation, especially when rising in large Quantities from the Water, may contain some of the dissolv'd Particles of the Salt, especially if they are very minute and fine, like those sent up by Water, when in a State of violent Ebullition and Evaporation. As much Salt, therefore, as is carry'd off by the Exhalation, so much must be wanting or defective in the concreted Crystals. Some, who are fond of reducing Phenomena to a certain Cause, in order to explain saline Crystallizations, think the Principle of Attraction best calculated and adapted to explain saline Crystallizations. They affirm, that the Parts of the Salt, dissolv'd in a large Quantity of Water, are more attracted by the Particles of the Water, than by each other, and remain separate from each other for a considerable time; but, after a large Quantity of the Water is expel'd in Vapours, and a small Pellicule of Salts begins to be formed on the Surface, since the saline Parts are brought nearer to each other, and almost into mutual Contact, and as the Force of Attraction is greatest during the Contact, this Pellicule more strongly attracts the Salt from the subjacent Water, than an equal Quantity of the Solution, which consists partly of Water, and partly of Salt. When this Pellicule becomes specifically heavier by Inspissation, it is broken into Parts, subsides, and, by attracting the saline Parts to itself, exhibits Crystals, which, say they, are not formed into Concretions, so long as the Solution is warm, because, so long as the Motion excited by Heat remains, the Whole of that Motion, which ought to be produced by the attractive Force, is hinder'd and destroy'd. But, since the Figures of the most simple Parts remain invariably the same, 'tis necessary the Forms of the Bodies, into which they are concreted, should also be the same: And because, on one Side of the same saline Particle, the attractive Force is greater than on the other, the Concretion always happens on those Sides which attract most powerfully: Hence it may be demonstrated, that the Figure of the minute constituent Particles is different from that of the Crystal itself. From what has been said 'tis sufficiently obvious, that Crystallization may be call'd a Species of Coagulation; and that it is a surprising and geometrical Operation of Nature, in which she exhibits herself to the Eye of the Spectator, not in a false and varnish'd, but in her genuine and real Dress.

CRYSTALLUM MINERALE. This is *Sal Prunelle*, purify'd by Solution and Crystallization.

CRYSTALLUS, Offic. Aldrov. Mus. Metall. 934. Chart. Foss. 35. Worm. 99. Schrod. 349. Boet. 217. Matth. 1388. Lact.



Laet. 56. Kentm. 46. Mont. Exot. 14. Geoff. Prælect. 77. *Lapis Crystallus*, Cup. Hort. Cath. Supp. 2. 50. CRYSTAL.

*Schroder* informs us, that it is astringent, and good in a Dysentery, Diarrhoea, the Coeliac Passion, Cholera, and uterine Fluxes; that it increases Milk, wears away the Stone in the urinary Passages, and is beneficial in the Gout. He farther says, from *Boetius de Boodt*, that two Scruples or a Dram of this, exhibited in Oil of sweet Almonds, is good for those who have taken Mercury. *Schroder* takes notice of the Salt, Magistery, Oil, Elixir, and Essence of Crystal: But I believe these are never either made or used.

*Frederic Hoffman*, in many Parts of his Works, recommends Crystal as a Medicine, under the Name of *Crystallus Montana*, which I have somewhere, by Mistake, translated *Muscovy Glass*, which is the *Lapis Specularis*.

Rock Crystal is a soft transparent Gem, resembling Ice, and its Figure is that of an hexagonal Pillar, pointed at both Extremities; or it may be said to be compounded of two Pyramids, with such a Pillar between them. A second Kind is found in *Iceland*, and in some Parts of *France*, especially about *Troyes* in *Champagne*, which seems to be made up of crystalline Plates, and fill in the Direction of all its plain Surfaces; and, when reduced to Powder, it still retains a rhomboidal Figure, so that even the finest Powder, view'd through a Microscope, shews a Congeries of very small rhomboidal Solids. Another Property of this Crystal is, that all Objects, seen thro' it, appear double; which arises from a double Refraction of the Rays of Light. A third Species of Crystal is that mention'd by *Dr. Lyster*, in the *Philosophical Transactions*, which is very smooth, pellucid, and glittering, coming near to a Diamond. Its Figure is spherical, oval, depressed, and sometimes representing an Hemisphere, or Hemispheroid, and in others roundish and irregular. It is very hard, and has an exquisite natural Polish, and is dug up in Pieces of different Sizes in several Places of *England*. *Geoffroy*.

CTEDON, κτηδών. A Fibre.

CTEIS, κτεῖς. The same as Pubes, or Pecten. Κτεῖς, in the plural Number, implies those Teeth which are call'd *In-cisores*.

CTESIPHONTIS MALAGMA. The Name of a Sort of Plaster describ'd by *Celsus*, *Lib. 5. Cap. 18. Sect. 31.*

CUBARIS, κυβάρης. A Wood-louse. See MILLIPEDES.

CUBEBAE, Offic. Ger. 1365. Emac. 1548. Park. Theat. 1583. J. B. 1. 350. Mont. Exot. 9. Ind. Med. 43. Raii Hist. 2. 1813. *Cubebæ vulgares*, C. B. Pin. 412. *An Pindaiba nonnullis Ibirá*, Pif. (ed. 1658.) 144? *Arbor baccifera Brasiliensis, fructu Piper recipiente*, Raii Hist. 2. 1593? *Arbor Bisnagarica Myrti amplioribus foliis, per siccitatem nigris, Cubebæ sapore*, Plukn. Almag. 43? Phytog. Tab. 140? CUBEBS.

This is a small round Fruit, or Berry, rather less than Pepper, with a dark-brown wrinkled Outside, and whitish within, having a little short Stalk at one End; whence it has been call'd *Piper Caudatum*, or Pepper with a Tail. It is not near so hot and biting as Pepper, but is of an aromatic Smell and Taste. *Cubebæ* come from the Island of *Java*.

Botanical Writers differ in their Opinion as to the Growth of *Cubebæ*; some, as *Mr. Ray*, *Dr. Plukenet*, and others, believing that they grow on Trees about as big as Apple-trees, in Bunches like Grapes; of which *Dr. Plukenet* gives a Figure, *Tab. 140. Fig. 1.* Others, as *Herman* and *Pomet*, will have them to grow on a scandent Plant like Pepper.

*Cubebæ* are heating and drying, strengthen the Stomach, expel Wind, comfort the Brain and Nerves, and are particularly useful against the Vertigo, or Giddiness, and other Disorders of the Head. *Miller's Bot. Off.*

They are brought from the Island of *Java*, and other Parts of the *East Indies*, and are recommended in a Hoarseness and Loss of Voice, especially when the Tonsils are stuffed and obstructed. The Dose is from ten to twenty-four Grains in Substance, to be chewed; or from a Dram to a Dram and a half in Infusion. *Geoffroy*.

They are, farther, recommended in Disorders of the Spleen, and in cold Distemperatures of the Uterus. *Dale*.

CUBIFORME OS. The same as CUBOIDES.

CUBIL. *Rulandus* explains this by *Terra Rubra*, Red Earth.

CUBITALIS MUSCULUS. A Name for the ANCONÆUS.

CUBITUS, κυβίτων. The Elbow, or the fore Arm from the Elbow to the Wrist. See BRACHIUM.

A Cubit, considered as a Measure, is eighteen Inches.

CUBOIDES OS. The Name of a Bone in the *Tarsus*. See CRUS.

CUCI. The Fruit of the *Palmae facie Cuciphora*, J. B. *Palmae cujus Fructus Cuci*, C. B.

This is a round, oblong, *East Indian* Fruit, of the Size of a small Fift, of a yellowish Colour, and sweet agreeable Taste, containing a very hard Nucleus. *Lemery* tells us, that this Fruit is cordial and restorative.

CUCUBALUS *Plinii*. The same as CACUBALUM, which see.

CUCULATUM MAJUS. Brandy, or Spirit of Wine. *Rulandus*.

CUCULLARIS MUSCULUS, or *Trapezius*. This Muscle derives the former Name from its Resemblance to a Friar's Cowl. It is a large, broad, thin, fleshy Plane, situated between the Occiput and lower Part of the Back, and from thence extending to the Shoulder, in the Figure of a large irregular Square. From this Figure the antient *Greeks* borrow'd its Name, and, together with the *Trapezius* of the other Side, it forms a kind of Lozenge.

Above, it is fixed in the superior transverse Line of the Occipitis, by a thin Series of fleshy Fibres, reaching to the Occipital Muscle, and appearing to cover that Muscle by a kind of Aponeurosis. Behind, it is fixed to the five superior Spinal Apophyses of the Neck, by means of the posterior Cervical Ligament, and immediately to the Extremities of the two lowest Spinal Apophyses of the Neck, and of all those of the Back.

These Insertions are by small and very short tendinous Fibres, except between the sixth Apophysis of the Neck, and the third of the Back inclusively, where these Fibres are something longer, and form a small Aponeurosis in form of a Crescent, which, with that on the other Side, represent a kind of Ellipsis pointed at both Ends. At the lower Spinal Apophysis of the Back, these Insertions are likewise tendinous, and form a small triangular Plane, which, together with that of the other Side, represent a Square.

From all these Insertions, the fleshy Fibres run in different Directions, and terminate by one continued Insertion in about one third Part of the Clavicula, in the posterior Edge of the Acromium, and through the whole Superior Labium of the Spine of the Scapula, all the Way to the small triangular Surface in that Spine, over which Surface the Fibres pass and slide freely without being fixed therein.

The Directions of all these Fibres are these: The superior run obliquely downward from the Occiput to the Clavicula: The next to these run a little less obliquely, and, together with some of the superior, are fixed in the superior articular Ligaments of the Shoulder, and in the Acromium. Here the Muscle forms a kind of Angle included in that formed by the Acromium, and Extremity of the Clavicle.

The rest of the Fibres that come from the Neck, and those from the superior Spines of the Back, are fixed in the Spine of the Scapula, reaching within an Inch of the small triangular Surface, becoming gradually less oblique, or more transverse, as they descend.

Lastly, The Fibres which come from all the other Spinal Apophyses of the Back, contract like Radii tending toward a Centre, and are inserted in the Extremity of the Spine of the Scapula, passing over the small triangular Space, the superior being more or less transverse, and the rest becoming gradually more and more oblique, running from below upward.

This Muscle covers immediately, the Splenius or Mastoideus Superior, Part of the Complexus Major, the Angularis, Rhomboides, and Part of the Latissimus Dorsi. The common Insertion of the two Trapezii in the Cervical Ligament is the Reason, that, in pulling either of them toward one Side of the Neck, the other will follow it a little beyond the Spinal Apophyses. *Winflow's Anatomy*.

CUCULLUS. The same as *Cucupha*. It signifies also a Piece of Paper wrapt up in the Form of a Horn, or Cope, in which Grocers include small Quantities of Spices, and Apothecaries sometime inclose Pills, or Boles.

CUCULUS, Offic. Schrod. 5. 317. Schw. A. 249. Belon. des Oyse. 132. Charlt. Exer. 73. Gesn. de Avib. 319. Will. Ornith. 62. Raii Ornith. 97. *Cuculus alter*, Aldrov. Ornith. 1. 416. *Cuculus minor*, Jous. de Avib. 14. *Cuculus nostras seu Aldrovandi secunda*, Raii Synop. A. 23. THE CUCKOW.

The whole Bird, and its Dung, are used in Medicine. The Bird burnt whole is recommended for the Gravel, Pains of the Stomach, and excessive Humidity of the same Part. *Rondel*. It is given with good Success also in the Paroxysms of Fevers. The Dung of the Cuckow, drank, cures the Bite of a mad Dog. *Schroder*.

CUCUMIS. The Cucumber.

The Characters, according to *Miller*, are;

It hath a Flower consisting of one single Leaf, which is Bell-shap'd, and expanded towards the Top, and cut into many Segments, of which some are Male, or barren, having no Embryo; but only a large Style in the Middle, which is charg'd with the Farina; others are Female, or fruitful, being fasten'd to an Embryo, which is afterwards chang'd into a fleshy Fruit, for the most part oblong, and turbinate, which is divided into three or four Cells inclosing many oblong Seeds.

1. *Cucumis sativus*; vulgaris. C. B. Pin. 310. Tourn. Inst. 104. Elem. Bot. 87. Boerb. Ind. A. 2. 77. Rup. Flor. Jen. 41. *Cucumis Hortensis*, Offic. *Cucumis sativus*, Park. Theat.



Theat. 772. *Cucumis vulgaris*, Ger. 762. Emac. 910. Raii Hist. 1. 645. Hist. Oxon. 2. 31. J. B. 2. 245. Chab. 134. CUCUMBER.

The *Cucumber* is a Fruit so well known, that it were Labour lost to say much of it. It grows upon a creeping rough Stalk, or Vine, as the Gardeners call it, which has several Tendrils or Claspers. The Leaves are rough, and almost prickly, in Shape somewhat resembling a Vine-leaf. The Flowers are of a yellowish White, Bell-fashioned, of one Leaf, divided into five Segments. The best Fruit is that which is longish, of a deep-green Colour, and beset with small, blackish, prickly Tubercles. They are raised every Year from Seed; flowering, and bearing Fruit, a great Part of the Summer.

Cucumbers are more eaten as Food and Sallad, than used medicinally; and are cooling to the Stomach, quenching Thirst, and provoking Urine. The Seed only is used in Physic, being one of the Four greater cold Seeds, and is accounted cooling and diuretic, and is frequently put into Emulsions against the Stone, Strangury, and Heat of Urine; as also in burning Fevers and Pleuritis. *Miller's Bot. Off.*

You must chuse such as are long, thick, full-ripe, having a thin Rind, and full of a white, juicy, and firm Pulp.

They moisten and cool very much, quench Thirst, allay the Sharpness of Humours, and too great an Effervescence of the Blood, and provoke Urine.

They are not easily digested, and produce gross and phlegmatic Humours.

They contain a little Oil, much Phlegm, and an indifferent Portion of essential Salt.

Cucumbers in hot Weather are proper for young Persons of an hot and bilious Constitution; but weak and tender People, who have a bad Stomach, ought to abstain from them.

#### R E M A R K S.

Cucumbers are Fruits much in Use for Food; they are usually yellowish, sometimes white, and at other times green. These Fruits moisten much, because they contain a viscous and thick Juice, very fit to qualify the over-violent Motion of the Humours. In the mean time, this Juice makes them hard of Digestion, because they continue long in the Stomach, and because their Parts cannot be disjoined without Difficulty; and therefore they ought always to be well dress'd and ordered before they are eaten, that this viscous Phlegm, wherewith they abound, may be the better digested: You may also mix some other Things with them to help Digestion; such as Onions, Salt, Pepper, and other Things of the like Nature.

We find a Number of Seeds in Cucumbers, which contain a sweet oily Kernel, agreeable enough to the Taste. This Seed is one of the Four greater cold Seeds, and much used by Physicians in Emulsions. It is also very qualifying, refreshing, and moistening. It operates likewise by Urine. *Lemery on Foods.*

The Juice of the Cucumber is nitrous, mucilaginous, emollient, diuretic, and refrigerating; it is therefore excellent Food for hot bilious Constitutions, in very warm Seasons, provided they are not eaten to Excess: But the *French* way of preparing them seems to be the best, which is to boil them in Soops; for the Coction divests them of Part of their Viscidity, and renders them more easily digestible. Decoctions of Cucumbers are recommended in inflammatory Fevers, in the Stone and Gravel, and when bloody Urine is discharg'd; but, in these Cases, their Indigestibility renders them unfit to be exhibited crude.

Small Cucumbers pickled with Vinegar, Salt, Pepper, and Dill, are said powerfully to excite an Appetite, when it languishes, in consequence of the Stomach being too hot.

The *Historia Plantarum*, publish'd under the Name of *Boerhaave*, informs us, that if the Branches of Cucumbers are much trodden upon, the Pulp of the Fruit will be bitter and emetic; and that a Water distil'd from Cucumbers when full-ripe, and beginning to putrify, purges smartly, in the Quantity of a Dram.

Mr. Ray, from his own Experience, tells us, that Cucumbers are a very wholesome Food, provided, after cutting them into thin Slices, they are shak'd well, so that a great deal of their Moisture may be got out, and then season'd with Oil, Vinegar, and Pepper. He farther informs us, that in a Fever which he labour'd under at *Florence*, he took the Pulp of Cucumber boil'd in Broth, by the Directions of Dr. Kirton, an *English* Physician; and that he found from it great Relief.

2. *Cucumis*; *fativus*; *vulgaris*; *fructu albo*. *C. B. P.* 310. *Var. a.* THE WHITE CUCUMBER.

3. *Cucumis*, *flexuosus*. *C. B. P.* 310. *Cucumeres*, *longissimi*. *J. B.* 2. 247. *Cucumis*, *oblongus*. *Dod.* p. 662. a. THE LONG TURKEY CUCUMBER.

4. *Cucumis*; *Aegyptius*; *rotundifolius*. *C. B. P.* 310. *Cucumis Aegyptiis Chate*. *J. B.* 2. 248. a. *Boerb. Ind. alt.* Vol. 2.

The *Chate*, or *Egyptian* Cucumber, has Leaves which are smaller, more white, soft, and round, than those of our Garden Cucumber. The Fruit is longer, more green, has a smooth, soft, even Rind, and a sweeter Taste than the other. The *Egyptians* esteem this a very wholesome Food; and the Physicians allow some Patients labouring under Fevers, and the Plague, to eat them crude, being persuaded, that they are in these Cases of singular Use. They prescribe them also boil'd in burning Fevers, with a View of refrigerating and moistening. They are taken, boil'd in Milk, in all hot Disorders of the urinary Passages, with very good Effect; and Emulsions of the Seeds are also exhibited in the same Disorders. The contus'd Pulp, mix'd with Milk, is apply'd to Inflammations of the Eyes, and of other Parts. The Juice, mix'd with Milk and Oil of Roses, is apply'd externally to Parts affected with arthritic Pains arising from a hot Cause. They direct also the distil'd Water to be taken for many Days together, with a View of correcting hot Intemperatures of the Liver, and of curing Inflammations of the Kidneys, and relieving under the Stone, and this with very good Success, as we learn from *Prosper Alpinus de Plantis Aegypti*.

CUCUMIS CANADENSIS. See SICYOIDES.

CUCUMIS GALENI. See MELO VULGARIS.

CUCUMIS PUNICUS CORDI. See BALSAMINA.

CUCUMIS SYLVESTRIS, or CUCUMIS ASININUS. See ELATERIUM.

CUCUPHA. *Cucupha*, *Cucullus*, *Pileolus*, *Byrethrum*, and *Birrethrus*, are so many Names, by different Authors given to what in *English* we call an *odoriferous Cap for the Head*. This is a kind of Bag appropriated to Diseases of the Head. It is made in the Form of a Mitre or Night-cap, either of Pieces of thin Silk or Linen stitch'd together at proper Distances. Between these Pieces of Cloth are put proper Cephalic Species, either cut small, or reduc'd to a gross Powder. These Species are sometimes intermixed with Cotton, before the internal and external Parts of the Cap are sutured together, that they may remain equally dispers'd, and render the Cap softer and more commodious for the Patient. These Species are also generally sprinkled either with some distil'd Oil, or Spirit, or Vinegar, according to the Intention of the Physician. It is to be apply'd to the Head, under some proper Covering, to prevent its falling off; or it may be sew'd to the Inside of a Cap. Sometimes two Cucuphas are order'd, one to be worn in the Night-time, and the other, which is sew'd to the Hat, is intended for the Day. When Half of the Head is only to be cover'd, in a Hemisphera, for Instance, or when the Application is only to be made to a particular Part of the Head, the Preparation us'd is call'd a *Semicucupha*. Cucuphas are to be worn so long as the Physician shall judge them beneficial for the Disorder they were intended to remove; and, if the Use of them is to be long persisted in, the Ingredients are to be renew'd, when they have lost their Virtues. The Species us'd for these Intentions are generally prescrib'd in the following Proportions; that is, one Ounce of Roots, two or three Handfuls of Leaves, two or three Pugils of Flowers, between one and two Drams of some proper Gum, and of Powders one Ounce. The Quantity of the whole Prescription rarely exceeds four Ounces; and, according to some, two, lest the Head should be too much burden'd by it. But this will be better understood by Examples, the first of which we shall take from *Hoffman's Consult. & Respons.*

Take of the Root of Florentine Orris one Ounce; of Amber, the best Benjamin, Storax, and Cloves, each two Drams; of the Herb Marjoram one Handful; of the Flowers of Lavender, Rosemary, and Roman Chamomile, each four Pugils: Mix up into a Powder, to be made into a Cucupha for strengthening the Head in Vertigos.

The other occurs in the same Author's *Medicina Rationalis Systematica*, and is prepar'd in the following Manner:

Take of the Roots of the Long Cyperus, of the Seeds of Fennel-flower, of Amber, Benjamin, Storax, and Florentine Orris, each one Ounce; of Musk, half a Dram; of the Flowers of Rosemary, Lavender, and Roses, each three Pugils; of Mother of Thyme, and Marjoram, each half an Ounce: Make into a Powder, to be used in Cucuphas, for defending the Head against cold and moist Intemperatures of the Air; as also in Defects of the Hearing, arising from a Laxity of the Parts.

Cucuphas act by virtue of the exhaling Species they contain, either by stimulating, contracting, and corroborating; or by relaxing the external Skin of the Head, and consequently by



by heating or refrigerating, since by that means their Virtues are more thoroughly convey'd into the Vessels thro' the Pores; for Cucuphas may operate in these several Manners. But the Physician in his Choice of the Ingredients ought to be directed by the Nature of the Disease, and the particular Constitution of the Patient. From what has been said, it plainly appears to be an Error, that aromatic and heating Substances are the only proper Ingredients in Cucuphas, intended for the Removal of cold and catarrhus Disorders; for *Stabl*, in his *Dissertatio de Multitudinis Remediorum Abusu*, justly observes, that we should be very cautious in the Use of these Substances: "For, says he, the more attentive Practitioners have long ago observ'd, that not only the daily, but the frequent Use of Cucuphas, compos'd of what we call the nervino-cephalic and odoriferous Species, whether for corroborating the Head in general, or the Memory in particular; whether for curing Vertigos, or removing that Drowsiness with which cold Catarrhs are accompanied; do often more Harm than Good, especially in plethoric Habits. But the least Disadvantage, attending the Abuse of these Things, is, that they generally render Patients so delicate and sensible of the smallest Changes of Heat and Cold, that by these very Changes they are afterwards much disorder'd, and their Heads surprisingly disturb'd." A preposterous and immoderate Use of refrigerating Cucuphas is not a little hurtful to the Body, by obstructing Perspiration, and driving the Humours inwards. There are various Species directed for this Intention in the several Dispensatories, such as the *Species pro Cucupha Francofurtensium* in *Schrod. Pharmacop.* the *Pulvis* and *Cucuphas* in *Lemery's Pharmacopée universelle*; and the *Species Cephalicæ pro Cucuphis* in the *Dispensat. Brandenburg.*

#### CUCURBITA. The Gourd.

The Characters, according to *Miller*, are,

It hath a Flower consisting of one Leaf, which is of the expanded Bell-shape, for the most part, so deeply cut, that it seems to consist of five distinct Leaves. This, like the Cucumber, has Male and Female Flowers on the same Plant: The Fruit of some Species is long, of others round, or Bottle-shaped, and is commonly divided into six Cells, in which are contain'd many flat oblong Seeds, which have sometimes a Border round them.

1. *Cucurbita lagenaria*; flore albo; folio molli. *C. B. P.* 313. *Hist. Oxon.* 2. 23. *Boerb. Ind. A.* 2. 80. *Cucurbita*, *Offic.* *Cucurbita lagenaria*, *Ger.* 777. *Emac.* 923. *Cucurbita lagenaria major*, *Park. Theat.* 769. *Cucurbita lagenaria*, *J. B.* 2. 216. *Raii Hist.* 1. 632. *Tourn. Inst.* 107. *Elem. Bot.* 89. *Chab.* 129. THE GOURD.

This will grow, in a suitable Soil, to be a large Plant, with great thick-corner'd rough Stalks, running a great Way on the Ground, or climbing by its Tendrils on Trees, Hedges, or any thing it meets with. The Leaves are large, rough, woolly, and corner'd; among which grow large, white, single-leaved Flowers, as big as white Lilies, and much of their Shape, full of soft Downiness on the Inside, and a little hairy without; which are succeeded by large Fruit, in Shape of a Bottle, which will sometimes hold several Quarts, whose Outside is a hard, but brittle Shell, containing a juicy Pulp, full of flattish oblong whitish-brown Seed. The Root is but small, in proportion to so large a Plant, being full of Fibres, and dying every Year. It is sown annually in rich Ground, flowering in July; and the Fruit is ripe here in September. The Seed is only used.

This Seed is one of the Four greater cold Seeds, being used as the Seed of the rest, in cooling and diuretic Emulsions. *Matthioli* says, that the green Leaves, applied to the Breasts of Nuisers, dry away their Milk; and some commend a Water distil'd from the green Fruit, beaten to a Pulp, as very good to cool sore inflamed Eyes. *Miller's Bot. Off.*

The Seeds should not be kept above a Year; for, after that, they grow rancid and inflammatory.

2. *Cucurbita*; falcata figurâ; folio molli; flore albo. *C. B. P.* 313. *Cucurbita*, sive *Zucchia*, omnium maxima, anguina. *Lob. Ic.* 644. THE SICKLE-SHAPED GOURD, WITH A SOFT LEAF, AND A WHITE FLOWER.

3. *Cucurbita*; longior. *Dod. p.* 669.

4. *Cucurbita*; latior. *Dod. p.* 669. a. *Prægn.*

*Boerb. Ind. alt. Plant. Vol. 2.*

CUCURBITA also signifies a Cupping-glass. See CUCURBITULA.

CUCURBITA. A Cucurbit. This is a chymical Vessel, so call'd from its Resemblance to a Gourd; for it gradually arises from a wide Bottom, and terminates in a narrow Neck. The Germans call it *Kolbe*, from the supposed Resemblance it bears to *Hercules's Club*. Some give it the Name of *Vas Urinale*, because a Glass Vessel of its Figure, only with a wider Neck and Mouth, is generally used for inspecting the Urine of sick Persons. This Instrument is of much Use in chymical Distillations, if a Capital, or an Alembic; with a Worm, is fitted to it; and, in Digestions and Sublimations, if a blind

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Alembic is adapted to it. The more the Wideness of the Bottom, at its largest Part, surpasses the Narrowness of the Neck, and the narrower and longer the Neck is, with the greater Difficulty is the Liquor in the Cucurbit distil'd. Upon these Circumstances depends the Choice we ought to make of Cucurbits; so that the less any Body is obedient to the Fire, which ought to raise it, Cucurbits the more receding from the now-mention'd Conditions ought to be used, and *vice versa*. It is call'd a blind Cucurbit, when a small inverted Cucurbit is adapted to another in such a manner, that the Neck of the one is inserted in that of the other. The Vessel call'd a *Circulatory* is one of this Kind. Their principal Use is in performing Digestions and Sublimations. Cucurbits are divided into those of a larger, an intermediate, and a smaller Size, which last are call'd separatory Cucurbits. If the Belly, or inferior Part, of the Cucurbit is of a spherical Figure, with a long cylindrical Neck, it is call'd a *Matrafs*, or a *Bolt-head*, which, according to *Boerhaave*, is of incredible Use in performing the most curious chymical Operations; for, since the Length of the Neck, and its Narrowness, in proportion to the Wideness of the Belly, may be enlarged at Pleasure, 'tis sufficiently obvious, that such a Degree of Resistance may be procured to the Liquor contain'd in the Cucurbit, that scarcely any of it shall ascend thro' the Mouth of the Vessel. But, in Vessels of this Kind, we are, above all Things, to consider the Pressure of the Atmosphere, which, possessing the Cavity of the Neck, surprisingly compresses the Liquors and Bodies contain'd within, and agitated by the Fire. This Column of Air is, as it were, a Covering to the Aperture of the Vessel, which presses equally every-where, and proves a Resistance to the Liquors endeavouring to rise; for whilst, by the Heat of the Fire, the rarefied Air, in the Belly of the Cucurbit, endeavours to raise the whole superincumbent Column of the Atmosphere, it meets with an equal Resistance from the Weight of this Column; by which means the liquid Particles, contain'd in this rarefied Air, are repel'd to the Bottom of the Vessel: Hence it happens, that the Parts agitated by the Fire are powerfully applied to the Bodies lodged in the inferior Part of the Cucurbit. This Phenomenon may be subjected to the Sight, when Alcohol of Wine is prudently expos'd to the Fire, in such a long and straight-neck'd Cucurbit; for, when the Liquor becomes so hot as to be almost boiling, a Smoak-like Exhalation is observ'd to rise in the Cavity of the Neck, which is again depress'd in the Form of a small fluctuating Cloud. By this Expedient the Digestions of Menstruums, with the several Substances to be resolv'd in them, are conveniently carried on, without any Loss, either of the Menstruum, or of the Body to be resolv'd; a Circumstance, which, in Chymistry, contributes to the Performance of many Experiments, which could not otherwise be made. Besides, these long-neck'd Cucurbits are singularly useful in separating pure alkaline and volatile Spirits and Salts from Water, Oil, and volatile Earth; for these Principles are, with great Difficulty, separated from each other. One Disadvantage, however, attends Cucurbits of this Kind; for, when they are very long, then the boiling Liquor, at the Bottom of the Vessel, not being able to rise so high, leaves the highest Part of the Neck cold, whilst its inferior Part is intensely hot: Hence, if the Steam should happen to rise suddenly upwards, it will, by its sudden Heat, burst the Neck of the Vessel, especially in the Winter-time, or in frosty Weather. Another Disadvantage attending long-neck'd Cucurbits is, that the Drops, collected in the superior Part of the cold Neck, falling down to the intensely hot Parts of the Belly or Neck, burst the Vessel in these Parts. Cucurbits are, for the most part, made of Glass; only sometimes, for Distillations, especially in an open Fire, earthen Cucurbits, call'd also *Canthari figulini*, are used. Those made of Copper, and lined with Tin, are call'd *Vesica Distillatoria*. In what Manner, by means of Cucurbits, Distillations, Digestions, and Sublimations are made, is to be seen under their several Articles. As for the Cucurbits used in trying Gold and Silver, by means of a Separation, with the Assistance of *Aqua-fortis*, we must observe, that they ought not to be of Crystal, but of the best common Glass, which, without suffering any Corrosion, bears the Action of the corroding Menstruums, and the Fire: Nor ought they to be too thick, especially in the Bottom, since, when they are so, they soon crack, when put upon the Tripod. They are eight or ten Inches high, and their Orifice is not above half an Inch in Diameter, lest, if a violent Effervescence should happen in the Matter contain'd in the Vessel, it should either come over the Lips, or lest some Part of it should be carried off in the Form of small Drops, resembling those of a gentle Rain, to which some of the dissolved Metal always adheres. By this Narrowness of the Neck, the Steams are also more effectually reverberated, and beat back. The Belly of this Species of Cucurbit is sufficiently large, if it contains an Ounce or two of *Aqua-fortis*. It is also proper, that the Mouths of these Cucurbits should be turn'd outwards, with a kind of broad or reflected Margin, that the Solutions, when pouring out, may not run down their Sides.



**CUCURBITULA**, *αμούα*. A Cupping-glass, so call'd at present, because usually made of Glass. But the Cupping-glasses of the Antients were made of various Materials, as Horn, Copper, or Glass. The Use of Cupping-glasses is very antient. *Hippocrates* frequently directs them either with or without Scarification.

The Physicians of the Methodic Sect made great Use of them, with a View of relaxing. They began to apply them the second or third *Diatritos*, that is, the fifth or seventh Day of the Disease, provided it was an acute one. With these they used almost to cover the Patient, in most kind of Disorders. In a Phrenitis, for Example, they apply'd them upon the Head, and the neighbouring Parts, round the Neck, upon the Thighs, the Belly, the Back, and the Hypochondria.

The Methodics generally used Scarification with their Cupping; or else apply'd *Lecches* to the Part; and, as soon as ever they were full, and fell off, they apply'd their Cucurbitulæ to draw what Quantity of Blood they thought necessary.

Sometimes they apply'd them, without any Scarification at all. These they call *Leves*, *νεφας*. *Cælius Aurelianus*, *Acut. L. 2. C. 29.*

They made use of others, which were call'd *Aventes*, and *Siccata*, by *Cælius Aurelianus*, *Acut. L. 1. C. 11.*

The Cucurbitulæ of the Antients were generally made of Copper, some with narrow Mouths, in order to attract more forcibly; others had their Mouths larger, and the Edges bent outwards, that they might not draw too forcibly. *Cælius Aurelianus*, *Acut. L. 3. C. 17.*

For the most sensible Parts they had them made of Glass or Clay. They had others also made of Horn. *Cælius Aurelianus*.

They always made use of Fire with those of Copper or Glass: But, as *Antyllus* writes, those of Horn were used with Suction by the Mouth, having a Perforation at the Top for that Purpose.

The Application of Cupping-glasses, and taking away Blood by their Means, was very frequently practised among the Antients, as we learn from *Hippocrates*, *Celsus*, *Galen*, and others. But these Instruments are now neglected, and quite disused, in many Countries; in *Germany*, particularly, they are no-where in Fashion, but among the Retainers to the Baths, who are accounted a lower Rank of Surgeons. However, since they come under the Consideration of Surgery, as the Operations perform'd by them are truly chirurgicall, we think ourselves obliged to give a brief Explication of their Use and Manner of Application. The Use of Cupping-glasses is very extensive, comprehending almost the whole Body: But their Application is to be consider'd under two different Circumstances; for they are either apply'd to the Place, first scarify'd with a Knife, or to a whole Skin: This latter is call'd a *dry*, and the other a *sanguineous* or wet Cupping. The Figure, which is common to them both, is represented *Tab. 33. Fig. 1.* In the dry Cupping, before the Application of the Glass, a lighted Candle, or Fire, is to be convey'd into it, that the Air being expel'd by the Heat, the Glass may immediately be adapted to, and impress'd upon the Body, till it firmly adheres with a strong Attraction; an Operation which the Practitioners at the Baths perform with great Dexterity. The View of the Operator, in this dry Cupping, is either to make a Revulsion of the Blood from other Parts, or else to invite it to the Place where the Glass is apply'd: Hence we see the Reason why *Hippocrates*, *Secl. 5. Aph. 50.* prescribes the Application of a large Cupping-glass under the Breasts of Women affected with too profuse a Discharge of the Menfes, which was in order to cause a Revulsion of the Blood upwards from the Uterus. And, upon the same Principle, I have myself, in a profuse Hæmorrhage at the Nose, and in Spitting of Blood, successfully apply'd them to the Feet, the Calves of the Legs, and just above the Knees. *Scultetus*, *Obs. 85.* gives us a remarkable Instance of a Woman, who, by the repeated Application of six Cupping-glasses, without Scarification, was not only relieved from the troublesome Symptoms caused by an Obstruction of her Menfes, but was also thereby freed from the Obstruction itself. Dry Cupping is also of Use in Pains of the Head, Vertigo, and other Disorders of that Part, by making a Revulsion, with the Glasses apply'd on the Head, to the Temples, behind the Ears, to the Neck or Shoulders. So *Celsus*, *Lib. 4. Cap. 2.* in violent Pains of the Head, prescribes Application of Cupping-glasses to the Temples, and back Part of the Head. In Palsies of the Members they are apply'd to the Hands and Feet, in order to provoke the Influx of the Blood and Spirits into the affected Parts; and in the Sciatica, or Pain of the Hips, or other Parts, they are apply'd to the Places affected. In all these Cases the Operation is to be repeated, till the Part appears very red, and is pain'd.

In *Germany*, and in other Northern Countries, Cupping is much oftener join'd with Scarification. In this Case the Part is first to be dry-cup'd, till it looks red; after which the Skin is to be cut, with about sixteen or twenty Incisions,

made with a small Instrument call'd a scarifying Lancet, represented *Tab. 2. Fig. 33.* These Wounds are to be made so close to each other, that the Cupping-glass may be able to cover them all, and to draw Blood out of them. See *Fig. 3.* The Operator must begin his Incisions in the lowest Part, and ascend gradually; for, otherwise, the Profusion of Blood from the Incisions in the upper Parts might obstruct his Work in the lower Parts. Having scarify'd the Skin, the Cupping-glass, first heated with a Candle, is to be apply'd, which, from the Pressure of the external Air firmly adhering to the Part, draws the Blood from the Incisions. But as it is customary for several Glasses, as four, six, or eight, and sometimes more, according to the Discretion of the Physician or Operator, or the Will of the Patient, to be at one time apply'd to different Parts of the Body, the Business of Scarification is to be so managed, that, while the first Glass adheres and draws, the rest may be apply'd, with Scarification, after the same Manner; which done, the first is to be removed, and the Blood pour'd into a Vessel; then the Glass is to be wash'd out with warm Water, the Skin cleansed with a Sponge, dipt in the same, and the Sponge again apply'd as before. When the Blood too soon ceases to flow, fresh Incisions are to be made, and the Glasses apply'd, till a sufficient Quantity of Blood be taken away; or, as it usually happens, till it stops of itself. The Operation being finish'd, the wounded Parts are cleansed with a Sponge and warm Water, and anointed with some Fat, to promote Conglutination. But, if the Blood continues to flow, which happens but seldom, you are to wash the Parts with Spirit of Wine, or *Hungary Water*, and bind them up with Bolsters, and a Bandage.

The modern Surgeons have, for Convenience to themselves, and Ease to the Patient, contrived an Instrument, consisting of sixteen small Lancet-blades, fix'd in a cubical Brass Box, with a Steel Spring. See *Tab. 33. Fig. 4.* The Side C. C. C. C. of this Instrument is apply'd to the Skin; and the Spring, conceal'd within, is raised by the Plate A. as with a Lever; when, on a sudden, by depressing the Button B. it falls with such a Force as to strike the Edges of the prominent sixteen Blades, all at once, into the Skin, making sixteen small Incisions, over which the Cupping-glass is to be apply'd, as before directed. We have the Figure of a Scarificator, not much differing from this, in *M. Paré's Surgery, Book 11. Chap. 5.* and, after him, in *Lambzweerde's Notes on Scultetus's Anamnetarium Chirurgicum.* But neither of these Authors proposes any other Use of this Instrument, than to scarify the Parts affected with a Gangrene; whereas this before us is used with good Success by our Cuppers, in all manner of Diseases which require Scarification, as I have often seen, and have myself experienced. *M. Garengeot*, indeed, *Tr. de Instr. Chir. Tom. 1.* explodes it, as a bad and useless Instrument; but, perhaps, that Gentleman never saw it used, tho' nothing is more common than this Method among us.

Scarifications are frequently used in various Parts of the Body, particularly in the Head, Neck, on or between the Scapulæ, behind or under the Ears, in the Occiput, Back, and Loins, Arms, and Legs, and especially near the Ankle-bones; of which last *Mannus* has written a particular Treatise, intituled, *De Malleolorum Scarificatione ex Veterum sententia*, wherein he highly extols it. *Rhodus*, *Cent. 3. Obs. 17.* says, that he had observed it attended with Danger; but this seems to be by Accident. To proceed: Scarifications are of Use in various kinds of Disorders, which, thro' a Redundance of Blood, require Revulsion, Derivation, or Evacuation. Of this Sort are several Diseases incident to the Head, particularly of the Eyes, Ears, Tonsils, and Uvula, Head-ach, Stuffings of the Head, Ophthalmies, Amaurosis, and Cataracts. In all these Cases it is scarce possible to express the great Benefit which may be receiv'd from Scarification, especially if used at a proper time, and judiciously repeated at proper Intervals. Nor is this Operation much less beneficial than Phlebotomy to those Patients, whose Veins are so small as to render it impracticable to take any Blood from them with the Lancet, as it often happens, and yet stand in Want of such an Evacuation: The Usefulness of this Method, in such a Case, I have several times experienced. That ingenious and skilful Physician *Morgagni*, *Adversar. Anatom.* advises Scarification of the Veins of the Occiput in Apoplexies, and comatous Disorders, being convinced of their surprising Efficacy, both from Reason and Experience. And *Zacutus Lusitanus* relieved a Patient from a dangerous Apoplexy by repeated Scarifications of the Occiput. This, indeed, seems to be the fittest Method for discharging the Blood, stagnating in the Veins of the Brain, which have a Communication with those of the Occiput; and restoring its usual Motion: But, then, *Morgagni* directs profound Scarification. This Scarifying of the Occiput is no less serviceable in Inflammations of the Eyes; and *Lancisi*, a celebrated Author, assures us, that in a Pleurisy, especially a Ballard Pleurisy, a deep Scarification of the affected Side, after Phlebotomy premised, affords speedy and surprising Relief. But it is to be observed, that Scarification, like Phlebotomy, is one



one of those stated Remedies, which are repeated at certain Seasons of the Year, and, being neglected, after the Patient is once accustom'd to them, endanger a Return of the same or even worse Disorders.

I must confess, indeed, that there are many among our Physicians and Surgeons, who would persuade us, that Scarification is of little or no Efficacy; and the principal Reason they offer is, that, by this Operation, only that Blood is discharged which lodges betwixt the Flesh and the Skin. But, with due Defe-  
 rence to their Authority, this Opinion of theirs seems too hastily form'd, and without just Foundation; for I am convinced, by my own Experience, and that of many eminent Physicians, that as much, and as thick, Blood has been discharged by Scarification as by Phlebotomy; and consequently the most severe and dangerous Distempers, which proceed from a Plethora, may be cured by this Method as well as by Venesection: I dare even assert, for good Reasons, that, on some Occasions, Scarification far excels Phlebotomy in this respect; that the Cupping-glasses, by their firm Adherence to the Skin, not only draw out, but attract the Blood, with extraordinary Force, from all Parts, to a determinate Place; for which Reason it gives speedy and effectual Relief in many Disorders of the Head, Eyes, and Ears, soporific Disorders, Inflammations of the Tonfils, Pains of the Joints, Hæmorrhages, and other Diseases of that Kind.

Again, there are other Physicians, who imagine Scarification to be not only useless, but pernicious; and they think themselves supported in their Opinion by Instances, where Scarification, administer'd at an unseasonable Time, or with impure and infected Instruments, has produced most fatal Effects, and even Death itself. Thus *Hildanus*, *Cent. 5. Obs. 71.* remarks, that a Palsy was produc'd by this Operation; which, however, might proceed from many other Causes. The most pure and innocent Person, say they, may be in Danger of contracting some foul Disease, by being scarify'd with an Instrument which had not long before been used upon one infected with the Lues Venerea, Leprosy, Itch, or other contagious Diseases; and, by this means, the Infection may be communicated almost in the same manner as the Small-pox is by Inoculation. See *Jordanus*, *Of the new Lues broke out in Moravia*; *Sporischiuss*, *Of the dreadful Symptoms succeeding the Use of Scarification and Cupping, at Brin in Moravia*; with the *Observations of Libavius concerning a malignant Scarification*, extant in *Horsii Obs. Lib. 4.* But, whatever Weight this Objection may seem to carry with it, it is not sufficient to induce us to condemn and reject Scarification; for if it were, we must, for the same Reason, discard Phlebotomy, which is subject not only to other dangerous Accidents, but to the same as are charged upon Scarification, if the Lancet be not well cleaned. Wherefore, that the Patient may have nothing to fear on this Account, he ought to employ none but such as are neat and cleanly for his Surgeons or Cuppers, and who use none but the cleanest and brightest of Instruments. But, if those who require Scarification cannot otherwise think themselves in absolute Security in this respect, I would advise them to provide proper Instruments and Scarificators of their own for the Operation, which they may always keep as clean and dry as they please for the Purpose.

There is another Method of Scarification, besides the above-described, used by Surgeons in violent Inflammations, recent or confirmed Mortifications, pestilential Carbuncles, and the like; in which Cases it has been found highly serviceable to make many small Incisions in the Skin with a proper Knife or Lancet, in order to discharge the stagnant and putrefying Blood, tho' without the Assistance of Cupping-glasses. This Kind of Scarification is usually denominated *Chirurgical*, to distinguish it from what is used by the Cuppers. Its principal Use is in Gangrenes and Mortifications, but some recommend it also in swell'd Feet, and in a Hydrocephalus, and in hydropical Affections, especially of the Scrotum. For, whenever any Member, for Instance the Leg, is so distended by a Dropsy, as to endanger bursting of the Skin, it may be proper to scarify the Part in order to evacuate the noxious Humours. But this must be done with Caution; for except Nature, on account of the excessive Distention of any Member, requires Relief from the Lancet, we must abstain from the Operation, for fear of a Gangrene or Sphacelus, which often happen in such a Case, and destroy the Patient. *Pliny, Hist. Lib. 28. Cap. 1. and 11.* advises Scarification of the Gums in the Tooth-ach, which, in my Opinion, is not improper on many Occasions.

Of much the same Nature with Scarification is the Method used by the *Egyptians*, and recommended by *Celsus*, *Lib. 4. Cap. 2.* where he directs taking of Blood from the Nostrils in the Head-ach; and by *Aretæus*, *De Curat. Chron. Morb. Lib. 1. Cap. 11.* Their Custom is to inflict many small Wounds on the Inside of their Nostrils, on the Ears, Lips, and Gums, which Practice is sometimes attended with surprising Success, in mitigating Inflammations, and in several other Disorders. See *Prosper Alpinus*, in *Med. Egypt.* and *Stablius*, *de Scarific. Narium Egyptiaca.* None, I believe, are so ignorant as not

to know what extraordinary Benefit and Relief to labouring Nature result from an Hæmorrhage at the Nose. The same People have another Practice, which is, to beat the Calves of their Legs with Cudgels till they look red, and then to scarify, or make small Incisions in them, by which means they procure a powerful Revulsion of the Humours in violent Inflammations of the Brain, Deliriums, Fevers, and want of Sleep. See *Prosper Alpinus*, *Med. Egypt. p. 72.* where you have a Figure of this Practice. At present these Methods of Cure are grown almost out of Use among *European Nations*.

Some of the antient Physicians and Surgeons, in Imitation of *Hippocrates*, the great Founder of their Art, had a Custom; in several Disorders of the Eyes, of scarifying the Insides of the Eyelids, and even the Eyes themselves, with a proper Instrument for the Purpose, as appears very plain from the Treatise of *Hippocrates*, *de Visu.* Physicians of great Eminence since *Hippocrates* disus'd this Practice, and it had for a long time been neglected, till it was revived in our Age by one *Woolhouse*, an *English* Physician, at *Paris*; and has, since him, been exercis'd with tolerable Success, as we are told, by others: But for the Instrument, and Manner of performing the Operation, we shall refer to the Article *OCULUS.* *Heister, Chirurg.*

**CUDU-PARILL.** The Name of a Shrub which grows in *Malabar* to about twice the Height of a Man, and which flowers all the Year round. The Leaves bruis'd, mixed with Milk, and apply'd to the Head by way of Ointment, procure Sleep, and remove Head-achs and Vertigoes. The Fruit bruised, and drank with Water, stops a Dysentery, and is good for Chaps in the Mouth. *Raii Hist. Plant.*

**CULÈTE.** A Name for the *Arbor Cucurbitifera Americana folio subrotundo.* *Marcgr. & Pison.*

**CUIPOUNA.** The Name of a Tree which grows in *Brasil.* The Juice of the Bark of that Species which bears yellow Flowers, expressed, and mixed with fair Water, cleanses and incurs inveterate Ulcers. *Raii Hist. Plant.*

**CULATUM.** Calcin'd. *Rulandus.*

**CULBICIO.** A Sort of Strangury, or rather a Heat of Urine. *Castellus* from *Velschius.*

**CULEUS.** The greatest Measure among the *Romans*, of liquid Things was the *Culeus*, or *Culleus*, containing twenty *Amphoræ.* *Rhemmius Fannius.*

*Est & bis decies quem conficit Amphora nostris,  
Culeus: hoc nulla est major mensura liquoris.*

For *nostris* undoubtedly it should be read *nostra.* *Pliny, Lib. 14. Cap. 4.* interprets seven *Culei* one hundred and forty *Amphoræ.* When, saith he, oftentimes each Acre will yield seven *Culei* of Wine, that is, one hundred and forty *Amphoræ.* A *Culeus* likewise contains forty *Roman Urns*, an *Urn* being the half of the *Amphora.*

*Columella, Lib. 3. Cap. 3.* reckons the *Culeus* of Wine at the Vineyard worth three hundred *Nummi*, or seventy-five *Denarii*, that is, according to *English* Rate, one hundred and forty-three Gallons, three Pints, and a half, for 2*l.* 8*s.* 5*d.*  $\frac{1}{2}$ , which is about a Halfpeny the Pint.

The *Culeus* likewise contain'd 160 *Congii*, or 960 *Sextarii.* We read of *Dolia Culearia*, and *Sesquiculearia.* *Dolia Sesquiculearia* must have been very large, being about 3  $\frac{1}{2}$  Hogsh-heads, and so therefore larger than our Pipes. *Culeus* signifies sometimes a Leather Sack. *Arbutnot.*

**CULMUS.**

The *Culmus* and *Culmen* of the *Latins*, and the *ὑλαμος* of the *Greeks*, are what we call a Stalk of Corn or Grass. In Grasses and Corns the *Culmus* or Stalk corresponds to the *Caudex* or Trunk in Trees, and to the *Calamus* in the *Cyperus* and *Bulrush*; so that it generally denotes that Part which reaches between the Root and the Ear or Panicle. Hence it appears, in general, what Plants are of the culmiferous Kind; but these are variously limited by the Founders of different Botanic Systems, who have adopted them for constituting some Genus of Plants. Thus, for Instance, according to *Morison*, to this Class belong all herbaceous Plants, which send forth a single Seed after each Flower, are furnished with straight arundinaceous Leaves, and are commonly call'd Grasses and Corn. These have their Seeds either naked and decorticated, or covered and wrapt up in Coats and Membranes. Both these are divided either into the spicated Kind, or into such as have scatter'd Ears. According to Mr. *Ray*, culmiferous Plants are such as send forth a Stalk which is round, geniculated with knotty Joints, hollow for the most part, with a single Leaf at each Geniculation; and these Leaves are slender, rising gradually from a broad Base, and terminating in an acute Point. The Plants of this Kind have either a large Seed useful for making Bread, and these are call'd frumentaceous Plants: Or they are such as have a small Seed, and these are call'd Grasses; tho', properly speaking, Corn and Grasses do not differ as to their Genus. Both these Species Mr. *Ray* divides into those of the spicated, and those of the paniculated Kind; but he classes them all under



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the common Genus of graminifolious Herbs, with a staminate Flower. According to *Herman*, culmiferous Plants are such as are apetalous, furnished with an Husk, and staminateous. *Ludwig*, in his *Definitiones Plantarum*, classes among the staminateous Plants, those of the culmiferous Kind, which have their Fruit contiguous to the Flower. According to *Boerhaave's* System, culmiferous Plants belong to the monocotyledon and apetalous Kind, and are such as have their Stalks hollow, distinguished by Joints, and at these Joints rendered firm by a kind of Septum or Diaphragm. From these Knots or Joinings arise single Leaves, which are straight, arundinaceous, alternate, and, at their Base, so constitute that Part of the Stalk, that, by a careful Separation of them, it is render'd extremely slender. These culmiferous Plants are divided into those of the spicated, and those of the paniculated Kind. The Stubble of Corn, remaining after the Ears are cut off, is also call'd *Culmus*. Hence the Word *Culmare*, if we may believe *Salmasius*, in his *Exercitationes Pliniane*, is applied to those who pull up Root and Stalk; and because, in earlier Ages, when Slates and Tiles were not known, the Roofs of Houses were cover'd with Straw and Stalks, the Tops of these Roofs were, for that Reason, call'd *Culmina*.

**CULMUS.** The Stalk of Corn or Grass. Hence culmiferous Plants are such as have a smooth, jointed Stalk, and usually hollow, and, at each Joint, wrapt about with single, narrow, sharp-pointed Leaves; and their Seeds are contained in chaffy Husks, as Wheat, Barley, &c.

**CULTER.** The third Lobe of the Liver is call'd by this Name in *Theoph. Protaspatrius*, according to *Castellus*.

**CULUS.** The Anus.

**CUMANA** *Arbor dicta*, De Lact. *Gacirma*, Nierenberg. These are Names for an Indian Tree, like that of the Mulberry, both with respect to the Appearance of the Tree, and the Fruit it bears, of which a Syrup is made, said to be good in Coughs and Hoarseness. The Wood is so hard, that it strikes Fire like a Flint.

**CUMANDA GUACU.** A Name for certain very large Indian Kidney-beans. These roasted, contus'd, and exhibited with an Egg, are given for Fluxes of the Belly: Boil'd, and made into a Cataplasim, and applied to the Belly, they are said to cure colic Pains; and they are, in this Form, applied to Apoplexions, with a View of resolving them.

There is a second Species, call'd *Cumanda Guara*.

**CUMBULU.** H. M. *Nux Malabarica unctuosus Flore cucullata*, D. Syen. *An Adbatoda Zeilanensium*, Herman?

This is a tall Tree which grows in Malabar. The Root, given in Decoction, with the Addition of a little Rice, is said to be of Service in the symptomatic Fever, attending the Gout. This Root also, exhibited in four Milk, is good in Flatulences, and Pains of the Breast; bruise'd, and boil'd in Water, it is useful in cold languid Fevers; roasted, and reduced to Powder, it is apply'd to Parts affected with the Gout; taken in four Milk, it relieves griping Pains of the Belly; and the Juice of the Leaves, drank, has the same Effect. *Raii Hist. Plant.*

**CUMINOIDES.** Wild Cumin.

The Characters are,

It hath Leaves consisting of many Lobes, like those of Burnet: The small Flowers, which consist of many Petals, are collected into a round Head: The Petals, or Flower-leaves, are fringed: Each of these Flowers are succeeded by a single Seed. *Miller's Dictionary.*

Cuminoides; vulgare. *Tourn. Inst.* 300. *Elem. Bot.* 250. *Boerb. Ind. A.* 132. **CUMINUM SYLVESTRE**, Offic. Ger. 908. Emac. 1067. Park. Theat. 372. Raii Hist. 1. 402. Chab. 384. *Cuminum sylvestre Capitulis globosis*, C. B. Pin. 146. *Cuminum sylvestre primum valde odoratum, globosum*, J. B. 3. 23. *Psoralea tenuifolia Cretica capitulis globosis*, Mor. Umb. Tab. 4. *Daucus odoratus Creticus Sanguisorbæ capitulis villosis*, Pluken. Almag. 130. *Umbelliferis affinis, capitulis globosis & villosis*, Hist. Oxon. 3. 265. **WILD CUMIN.**

This Plant grows principally in Crete. The Part used in Medicine is the Seed, which is recommended against Gripes and Flatulencies, for curing the Hiccough, for removing Sugillations, and repelling Inflammations of the Testes. *Dale.*

**CUMINUM.** Cumin. *Miller* derives this from *κωμιν*, to bring forth, because it is very efficacious against Barrenness.

The Characters are,

The Root is annual: The Leaves are like those of Fennel: The Seeds are small, long, narrow, and crooked; two of which succeed each Flower, as in the other umbelliferous Plants.

1. *Cuminum*, Mor. Umb. 4. *Hist. Oxon.* 3. 271. *Boerb. Ind. A.* 49. *Cuminum*, Offic. *Cuminum, sive Cuminum Sativum*, J. B. 3. 22. Raii Hist. 1. 433. *Cuminum sive Cuminum*, Chab. 384. *Cuminum vulgare*, Park. Theat. 887. *Cuminum semine longiore*, C. B. Pin. 146. *Cuminum sat. v. m. Dioscoridis*, Ger. 207. Emac. 1066. *Feniculum Orientale Cuminum dictum*, *Tourn. Inst.* 312. **CUMIN.**

This is a small low Plant, seldom growing above a Foot high, with many fine slender Leaves like Fennel, but not near so

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large, and winged. The Flowers grow in small Umbels, of a reddish-white Colour, each of which is followed by two long, yellowish-brown, striated Seeds, of a very strong, not unpleasant Scent. The Root is small, and perishes after giving ripe Seed. It is sown yearly in great Quantities in Sicily and Malta, from whence we have the Seed, which is the only Part us'd.

Cumin-seed is one of the Four greater hot Seeds, and consists of very warming dissolving Parts, being very good to expel Wind out of the Stomach and Bowels, and is frequently put into Glysters for that Purpose, as well as given in Powder, or infused in Wine. Outwardly apply'd, it is of great Service in Pains of the Breast or Side, as well as in the Bowels.

The only officinal Preparation is the *Emplastrum à Cymino*. *Miller's Bot. Off.*

## Emplastrum à Cymino: CUMIN PLAISTER.

Take of Cumin-seeds, and Bay-berries, each half a Pound; of Ground-pine, four Handfuls: Boil them in twelve Pints of Spring-water; and afterwards, in the strained Liquor, boil six Pounds of Burgundy Pitch to the Consistence of an hard Plaister. Let them stand together till almost cold, then pour away the separated Decoction. Melt again the Pitch, and to it, by degrees, add, in Powder, Bay-berries and Cumin-seeds, each half a Pound; and continually stir them together till the Plaister acquires a due Consistence.

This was never received by any officinal Dispensatory, until by the College of London; and the first Edition of theirs puts half a Pound of the Oil of Dill with a Pound of each of the Powders, so that the Consistence in both comes out pretty much the same. The Ground-pine is likewise an Addition in the Decoction; tho' the first Receipt directs no Decoction at all. If good Care is not taken, that the Seeds and Berries be reduc'd to a Powder, without too fierce a Drying, the Whole will be of a brittle Consistence; but otherwise there will remain in them so much of an oily Moisture, as not to make the Pitch harder than it would be without them, but give to the Whole a very good Body.

Besides the preceding, *Dale* mentions the following.

**CUMINUM SILIQUOSUM**, Offic. Ger. 908. Emac. 1067. *Hypecoi altera Species*, C. P. Pin. 172. *Hypecoum alterum*, Park. Theat. 372. Raii Hist. 2. 1328. *Hypecoum siliquis pro-pendentibus, non articulatis, bivalvibus incurvis*, Hist. Oxon. 2. 579. *Hypecoum tenuiore folio*, Tourn. Inst. 230. *Elem. Bot.* 197. **CODDED WILD CUMIN.**

This Plant is said to have the same Effect as the Poppy. It grows in Spain, where it flowers in May. *Dale.*

**CUMINUM PRATENSE.** See **CARUM**.

**CUMINUM SYLVESTRE.** See **CUMINOIDES**.

**CUNANE.** The Name of a large Indian Fruit, which grows on a small Tree, call'd *Morremor*. The Inhabitants of the Country where it grows roast it, and eat it as a Remedy against the Head-ach. *Raii Hist. Plant.*

**CUNEALIS SUTURA.** The Suture by which the Os *Sphenoides*, or *Cuneiforme*, is join'd to the Os Frontis.

**CUNEIFORME OS.** The sphenoidal Bone. See **CAPUT**.

**CUNEIFORMIA OSSA.** According to *Blancard*, the fifth, sixth, and seventh Bone of the Tarsus are thus call'd. See **CRUS**.

**CUNICULUS**, Offic. Schrod. 5. 284. Raii Synop. A. 205. Mer. Pin. 168. Aldrov. de Quad. Digit. 382. Schw. de Quad. 86. Jons. de Quad. 111. Gesn. de Quad. 362. Charlt. Exer. 23. **THE RABBIT OR CONEY.**

A Rabbit, calcin'd whole, is said to cure a Quinsy, or Inflammations of the Fauces. The Fat is used for resolving Indurations of the Tendons and Joints, and the Brain is said to resist Poisons.

Considered as an Aliment, those Rabbits are to be chosen, which are tender, fat, well fed, and neither too young, nor too old. Rabbit is better in Winter than Summer, because its Flesh is the more tender and mellow.

Rabbit is very nourishing, and affords good Food.

When they are young, they breed many viscous Humours; and, on the contrary, when they are too old, their Flesh becomes dry, hard, and not easy of Digestion.

A Rabbit contains much volatile Salt and Oil.

It agrees, especially in Winter-time, with any Age and Constitution, provided it be used moderately.

## R E M A R K S.

A Rabbit is an Animal well known, and like a Hare in many things: First, because it is very near of the same Make, tho' smaller; secondly, because it is of a fearful Nature, runs very fast, is very quick of Hearing, and chews the Cud; thirdly,



thirdly, because it multiplies apace, which made many say, who believed that a Hare was an Hermaphrodite, that a Rabbet was so too.

Rabbets are either wild or tame; the first of which are the more dainty and pleasant Food, not only because they are more in Motion, and contain less superfluous Moistures, than the others, but also because they feed upon several aromatic Plants, such as Thyme, and the like, which gives their Flesh a nicer and more agreeable Relish. Rabbets differ much in respect of their Colour; for some are white, others brown, some black, others yellow, and some again party-colour'd.

Though a Rabbet is in many things like a Hare, yet the Flesh somewhat differs from the other in Taste: It is also moister, tenderer, and more juicy. We do not think, that Rabbets are such wholesome Food when very young, as when of a middling Age, because they are full of viscous Humours when young: On the contrary, a Hare being of a drier Temper than a Rabbet, ought to be used younger than the other; tho' most Authors, who have writ concerning a Rabbet, look upon it as bad Food, fit to produce gross and melancholy Humours: However, when it is endu'd with all the Properties we have mentioned, it produces few ill Effects.

Some fancy, that Rabbets Brains weaken the Memory, because this Animal cannot for a Moment after retain in mind the Toils laid for her, and that she had just escap'd; but this Conjecture being grounded upon a weak Foundation, I shall not endeavour to confute it. *Lemery on Foods.*

**CUNTUR.** The Name of a very large *American Eagle*, according to *Lemery*, whose Fat is said to be resolvent, and good for the Nerves.

**CUPELLA**, or, according to some, *Capella*, *Catellus Cineris*, *Cineritium*; *Patella* or *Testa probatrix*, *exploratrix*, or *docimastica*, are so many Names for what we call a *Cupel*, or *Test*. This is a chymical Vessel made of Earth, pretty thick, and of the Form of a Dish or Platter, in which Assay-masters examine Metals, in order to discover the Quantity of Gold or Silver intermixed with the other fossile Bodies, of which they are compos'd. It sustains the highest Degree of Fire, cannot be melted by any Degree of common Fire, and retains all fus'd Metals; but in it all the fossile Portions of any Metal, when mix'd with fus'd Lead, are carried off, except Gold and Silver, which are left fus'd in small Globules. This Vessel has a small Cavity, which is a somewhat obtuse spherical Segment, with a small Canal at its Margin, thro' which the Metal examin'd may be the more commodiously pour'd out. The external Surface of this Vessel towards its Base is somewhat like a truncated Cone, that it may stand the more securely. These Vessels may be made of different Bunks, according to the Quantity of the Metal to be tried. They may be made either of some proper Earth, or of Ashes obtain'd from the calcin'd Bones, almost of any Animals, except those of Hogs; for the Cupels made of these, besides Lead and other Fossils, also absorb some Parts of Gold and Silver. The Ashes of calcin'd Plants are also proper for this Purpose, provided their Salts are well wash'd out of them. Plaster also of some Kinds is fit for making these Vessels; and those made of it *Cramer* thinks preferable to those before-mentioned. For this Purpose the smaller Bones of Calves, Oxen, Sheep, and Horses, are most commonly us'd; and these are the more easily calcin'd, the longer they have been expos'd to the Injuries of the Weather. The Manner of calcining them is in the highest Degree of an open Fire, for some Hours or longer, according to their Thickness. The Mark of a perfect Calcination is, when no black Spot appears either externally or internally, when they are broken. These Bones, thus calcin'd to the highest Degree of Whiteness, are to be triturated in a Mortar, and pass'd through a fine Sierce; or, if such a one cannot be had, the grosser Powder pass'd through a common Sierce, is to be levigated upon a Marble, and then wash'd with fresh warm Water. Since the Bones of Fishes are generally pretty small, they are more easily calcin'd than those of other Animals, in a large open earthen Vessel; and, when thus prepar'd, they are preferable to the others. A small Quantity of the Ashes of these Bones, thus treated, is to be put into a clean earthen Vessel, and a second time calcin'd in a strong Fire, for some Hours. Then the Ashes are to be wash'd with Water, and levigated upon the Porphyry to a fine Powder. This Powder, when moisten'd by Drops of pure Water, or the White of an Egg diluted with Water, till the Mass coheres, when strongly compress'd between the Fingers, is to be put into a Copper, or brass Mortar, of any Size, or if calcin'd Plaster is used, it is to be sprinkled with a Solution of Vitriol. Then the Mass is to be excavated with the Pestil, apply'd with a sufficient Force. Over the Surface of the Cavity thus form'd, the fine Powder above-mentioned is to be sprinkled dry, by means of a Sieve, and strongly press'd to the Mass by a Stroke or two of the Pestil, that its smallest Inequalities may be fill'd

up; and, after the Inequalities protuberating on the upper Margins and the Bottom, are cut off with a sharp Knife, the Cupel is to be laid by in a dry Place. The Cupels form'd of the Ashes of Bones, the Spines of Fishes, and Plaster, are of all others best; because, before they are applied to Use, there is no Necessity for their being strongly burn'd, nor do they require so strict an Attention with respect to the Degrees of Fire. But if the Ashes of Wood are added, the Cupels must be burn'd for half an Hour, or an Hour, before the Metal is put in. And, unless this Circumstance is remembered, the Metal is thrown out of the Vessel, Drop by Drop, by the Eruption of the aqueous Vapours; for these Cupels can never be sufficiently dried by the Air alone, since there is always some Portion of an alkaline Salt adhering to the Ashes of the Wood, which attracts the Moisture of the Air, as we are sufficiently inform'd by the brownish Colour of these Ashes, and by an Affusion of the Solution of Sal Ammoniac upon them. Hence also these Ashes have a stronger Tendency to Vitrefaction, than the Ashes of Bones. Besides, the dry Powder, with which the Cavity of the Cupel was sprinkled, is more easily separated during the Cupellation, if the Ashes of Wood have been mix'd with the Materials of the Cupel, which proves very prejudicial to the Operation; because by the Adhesion of these Ashes the Weight of the Metal is either increas'd, or, in purging it, some of it is lost. In a Cupel made of the Ashes of Bones, the Spines of Fishes, or Plaster, the Cupellation is longer about, but then it is more safely perform'd, than if Ashes of Wood had been added. It indeed receives the melted Metal more slowly, in consequence of its compact Texture; but, for this very Reason, it is the less to be apprehended, that any Part of the perfect Metal should be absorb'd, tho' the Degrees of Fire should be less accurately observ'd. The best Cupels made of Bones may be used for two or three Trials, whereas others are only fit to be once employ'd.

**CUPEROSA.** Copperas. See **VITRIOLUM**.

**CUPHOS**, *κρόκος*. Light. When applied to Aliments, it imports their being easily digestible; when to Distempers, that they are mild and gentle.

**CUPRESSUS.** See **CYPRESSUS**.

**CUPRUM.** Copper. See **ÆS**.

**CURA AVENACEA.** The Name of a Decoction, of which there is a Description in a *High Dutch* Book, intitled, *Englisches Artzey-Buchlein*, as follows:

Take of recent Oats, entire and well wash'd, one Pound and an half; of the recent Root of wild Succory slic'd, one Handful; and of Spring-water, twelve Pints: Let them be boil'd in a clean earthen Vessel, to the Consumption of Half, and then strain the Liquor through a linen Cloth. To the strain'd Liquor add half an Ounce of Sal Prunellæ, and six Ounces of coarse Sugar. Then boil it again, and, taking it off the Fire, let it stand cover'd for a Day and a Night in some quiet Place; the next Day let it be pour'd off into glass Vessels, taking care that the thick Matter, remaining in the Bottom, be not mix'd with the pure Liquor intended for Drink. Let the Glasses be closely stop'd, and the Liquor preserv'd for Use in a Cellar.

Two ordinary Cupfuls of this Liquor, exhibited twice a Day, that is, two or three Hours before, and three Hours after Dinner, are highly extol'd against all Kinds of Fevers, Colic Pains, Pleurifies, Itches, cutaneous Tumors, and hypochondriacal Disorders; as also for cleansing the Kidneys from Sand, and opening Obstructions of the Viscera. The Use of it is order'd to be persist'd in for thirteen Days. If the Body is cacochymic, a gentle Purge ought to be exhibited before it is used. The Effects of this Medicine are most singular in the Dog-days; and it is highly extol'd as a Preservative, if used once a Year, for two Weeks, either in the Spring, the Autumn, or during the Dog-days. The Inventor of this Decoction was *Johannes de S. Catharina*, who, by using it three a Year, in the Spring, Autumn, and Dog-days, is reported to have protracted his Life, without Sicknefs, to the hundred and twentieth Year of his Age. After Doctor *Richard Lower* had observ'd the Efficacy of this Drink in the Cure of several Diseases, he made the Preparation of it public. The celebrated *Hoffman* publish'd a Dissertation *de Cura Avenacea*, in which, instead of Sal Prunellæ, he orders the Use of depurated Nitre, both in continued and intermittent Fevers; because it is more efficacious than the Sal Prunellæ, for allaying and lessening the Effervescence of the Blood. In the same Dissertation he observes, in general, that the two Boilings, order'd by *Lower*, are by no means necessary; and that the Sugar and Nitre should be added in the Beginning of the Operation. When it is sufficiently boil'd, he orders the Pisan to be put into Stone or Glass Vessels, kept for twenty-four Hours in some cold Place, and then pour'd off from its Sediments. He also

observes,



observes, that this Liquor cannot be kept long, especially in the Summer, when, by the Access of the hot Air, it undergoes a Fermentation, acquires an acid Taste, and ungrateful Smell, by which means it becomes unfit for drinking. For this Reason, 'tis highly necessary it should be kept in a cool Place, and in close-stopt Vessels. If any one desires to give this Liquor a fine Colour, which contributes nothing to its Virtues, he must boil with it one Ounce of Alkanet-root, or two Ounces of the Rasps of red Sanders; which was the Method of preparing it used by the celebrated *Joannes Francus*. The red Sanders, with the other Powders, must be put into the Vessel when the Fire is not very strong, lest the Liquor should come over the Margin of the Vessels, and its reddish be chang'd into a greenish Colour. From a Consideration of the Ingredients, 'tis not to be doubted, but this Liquor is of singular Efficacy in the Cure of many, and these very terrible Disorders; for it affords singular Relief, where Obstructions of the Vessels are to be remov'd; where peccant and recrementitious Salts are to be wash'd out of the Habit; where the viscid Juices are to be diluted, and a due Degree of Moisture and Humidity to be restor'd. It is also excellent for allaying Thirst, alleviating all feverish Heats, and stopping Hæmorrhages. Hence it is an approv'd Remedy when used for some Weeks, in cronical Diseases, especially Asthmas, Dyspnoeas, Gouts, the Stone of the Kidneys and Bladder, the wandering scorbutic Gout, scorbutic and hypochondriac Disorders, the Jaundice, Obstructions of the Menfes, a Chlorosis, Lippitude of the Eyes, the Itch, and all Impurities of the Blood, provided bitter Balsamics are now-and-then interpos'd, in order to prevent the Weakness of the Stomach, to be apprehended from the large Quantity of Water. This Drink may also be prescrib'd in all those Disorders in which medicated and mineral Waters are proper; and we must proceed in the same manner in both Cases; that is, we must prepare the Body by Venesection and Purgatives, and increase the Dose daily, beginning at one Pint, and proceeding to use two; at which Number we are to stop, through the whole Course of the Cure, which is to be finish'd by some Laxative of a balsamic Nature. *Rieger*.

CURCAS, also call'd CARPATA, and, in *Malabar*, CHIVIQUELENGA.

This is a Fruit which grows in *Malabar*, about the Size of a Filberd, and in Taste resembling a boil'd Mushroom. It is not used in Medicine.

CURCULIO. A small Insect, which breeds in Corn, call'd the Weevil. The Leaves of Pellitory of the Wall, are reported to destroy these Insects.

CURCUMA. Offic. J. Comm. Hort. Amst. 107. Park. Theat. 1584. Ger. Emac. 32. C. B. Theat. 679. *Curcuma Officinaria*. Hort. Amst. Cat. 107. *Curcuma radice longa*. Herm. Hort. Lugd. Bat. 208. C. Comm. Flor. Mal. 99. *Curcuma foliis longioribus & angustioribus*. Breyn. Prod. 2. 40. *Curcuma sive Terra merita*, *Officinaria radice crocea*. J. B. 2. 746. *Curcuma sive Officinaria Terra merita*. Chab. 245. *Cyperus genus ex India*. C. B. Pin. 37. *Crocus Indicus*, *Arabibus Curcum*, *Officinis nostris*, *radix Curcuma dicta*. Bon. 116. *Cannacorus radice crocea sive Curcuma Officinaria*. Tourn. Inst. 367. Boerh. Ind. A. 2. 127. *Manjella Kua*. H. M. P. 11. 21. *Kaba*. Herm. Mus. Zeyl. 30. TURMERIC.

This is a longish, firm, tuberous Root, of a brownish yellow on the Outside, and a deep saffron Colour within; of a strong Scent, and a hot, but somewhat bitterish, Taste. It comes from the *East Indies*. It is well describ'd by *Herman* in his *Hortus Lugduno-Batavus*, P. 209. who says, "That it has a tuberous long Root running across the upper Part of the Earth, like Ginger, of the Thickness of a Finger, having many round knotted Circles, and many large Fibres; from each of which Knots spring three or four large Leaves upon large Foot-stalks: They are about a Span long, and scarce half so broad, sharp-pointed, and very much resembling the Leaves of the *Canna Indica*. The Flowers grow out of the strongest young Roots, on pretty long Foot-stalks, in Fashion of long scaly Spikes, first of a pale green, and afterwards of a reddish yellow Colour; from among which come forth yellow or red Flowers, in Shape like those of the *Canna Indica*, but smaller; which are succeeded by tricapsular Seed-vessels, containing small round Seed."

This Plant grows copiously in the Woods of the *East Indies*, and is propagated both from the Seed, and the Buds cut from the Root. It is said, that in that Country there is scarce a Garden in which it is not cultivated for the sake of the Root, which becomes ripe, and is dug up, after the Flowers are wither'd. Because the Root tinges Bodies with a yellow Colour, just as the garden Saffron does; 'tis therefore call'd *Crocus Indicus*, and *Curcuma*, which is a Name given by the *Arabians* to every Root of a saffron Colour. The *Portuguese* call it *Saffian de Terra*, or subterraneous Saffron. In the Shops it is call'd *Terra Merita*, because, when reduced to a Powder, it resembles that Species of yellow Earth call'd Oker.

Some of the Literati are of Opinion, that this Plant is the *Cyperus Indicus* of *Dioscorides*, which, he says, "grows in the Form of Ginger, is possessed of the Bitterness, and other Virtues, of Saffron, when chew'd; and which, when the Hairs are anointed with it, speedily makes them fall off." Hence we understand, why some make a Distinction between the Curcuma of the *Greeks*, of which we now speak, and that of the *Arabians*, which they take for the greater Celandine. According to *Bontius*, and *Rumphius*, in his *Herbarium Amboinense*, the *Indians* levigate it on Marble, together with other fragrant and aromatic Species, which they reduce to the Consistence of an Ointment, with newly-express'd Oil of Coco, or any other Oil. With this Preparation they anoint their Bodies, to defend them from the troublesome Bites of Flies, for the sake of its grateful Smell, in order to keep themselves warm in cold and rainy Days, and with an Intention to lessen the intensely cold Paroxysms of Fevers. This Species of Ointment is by them call'd *Borri-Borri*, or *Boberri*, with them the most common Name for Turmeric. The Inhabitants of that Country find, from daily Experience, that the recent Root of Turmeric bruised, sprinkled with Oil of *Indian* Coconut, roasted in its own Leaves, under the Ashes, and applied to the Parts opposite to those in which Splinters, Thorns, or the Points of Arrows, are lodg'd, soon expels these extraneous Bodies. When prepar'd in the same manner, and applied, it is also said to soften Impostumations, to resolve obstinate and inveterate Tumors, to conglutinate recent Wounds, to soften and deterge callous and sordid Ulcers, to alleviate the Pains attending Contusions and Sugillations, and to afford Relief in Luxations. It is also used as a Suppository, when reduc'd to a proper Form, and anointed with Salt and Oil. Its Juice is dropt into the Eyes, in order to remove Defluxions and Inflammations; and pour'd into the Ears, with an Intention to soften and maturate Tubercles. It also checks Inflammations and Erysipelas, when anointed with it; and, when mix'd with Juice of Lemons, and applied by way of Ointment to the Parts affected, it is said to cure the Itch. *Bontius* observes, that the Inhabitants of *China* use this Root like that of the white Hellebore, in their sternutatory Preparations. Besides, the *Indians* make much use of it as a grateful Seasoning in the Preparation of their Aliments. The Juice, or Powder of this Root, is also used for promoting a Discharge of the Urine, provoking the Menfes, and expelling the Secundines; as also for resisting and preventing Intoxication. This Root, imported from the *East Indies*, is also used by the *Europeans* for medicinal Purposes; and we commonly divide it into two Kinds, the round, and the long; but this Division is groundless, since these apparently distinct Species, are but different Parts of one and the same Root. The round is a Congeries of tuberosse Glands; whereas the long are the several Branches or Shoots arising from them. That is esteem'd best, which is recent, fresh, thick, heavy, and hard to be broken. It seems to consist of an oleous volatile Salt, in Conjunction with a bitter Sal Salsum; both of which are involv'd and wrapt up in viscid and earthy Parts. Abstracting from its saffron-colour'd Juice, which it yields when chew'd, it seems to be possess'd of Virtues very much resembling those of Ginger, though its Taste is somewhat more faint and languid. It communicates its Colour to the Urine, which, by the Use of it, assumes a saffron Colour, and tinges Linen. Hence we may easily deduce its medicinal Virtues, and conclude, that it is moderately stimulating, resolvent, and aperient. For this Reason, it is highly extol'd as an efficacious Remedy in Obstructions of the Lungs, Liver, and Spleen; in Infarctions of the meseraic Veins; as also against the Stone in the Kidneys and Bladder; and for provoking the Menfes, and facilitating Labour: According to *Junker*, it is of very considerable Service in cold Disorders arising from a mucid and corrupted Serum; as also in Cachexies, Dropsies, and cedematous Swellings of the Feet. But it is a precarious Medicine, when used against the Stone, or in difficult Labours, since, in these Cases, the only good Effects it can produce, are to be ascrib'd to its diuretic Virtue. But it is most of all extol'd on account of its Efficacy in the Jaundice; for which Purpose, the *Chinese* preserve it in Sugar. But *Wedelius*, in his *Amarnitates Materiae Medicæ*, gives the Preference to its Powder, mix'd with an equal Quantity of the Salt of Wormwood. *Junker*, when treating of the Virtues of Turmeric, uses the following Words: "It is justly celebrated for curing the Jaundice, provided it is exhibited at a proper Time, when the Body is not intensely hot, and when there is no violent Congestion of Blood to the Liver; but, at the same time, I could never find any specific Virtue in it against this Disease." That this Root is of singular Efficacy against Stones in the Gall-bladder, we learn from *Hoffman*, in his *Clavis Schraderiana*, where we have an Account of a Man afflicted with most acute Pains in his Right Hypochondrium, who, by taking half a Dram of Turmeric-root in a Draught of warm butter'd Ale, was in two Hours time freed from his Pains, and voided some small Stones, of a clayish



clayish resplendent Colour, by Stool; by which means he was restor'd to perfect Health. For internal Use, its Dose in Substance is, from a Scruple to a Dram; but, in Decoctions and Infusions, two Drams of it are generally prescrib'd. The *Pulvis*, or the *Species Diacurcumæ*, does not in the least partake of the Turmeric, but derives the Name from the Saffron.

CURMI, *ῥῆγμα*. *Dioscorides*, Lib. 2. Cap. 110. informs us, that this is a Drink made of Barley, which is frequently used instead of Wine; but that it causes Pains of the Head, generates bad Juices, and prejudices the Nerves. Such a Kind of Liquor, says he, is also prepared of Wheat, in the Western Parts of *Iberia*, and in *Britain*.

CURSUS is sometimes employed to express any Flux of Humours.

CURTUMA, or CURSUMA. The *Chelidonium minus*. *Rulandus*.

CURURU-APE. The Name of a scandent Tree which grows in *Brasil*, bearing Pods, which contain Seeds like Beans. These Seeds, thrown into the Water, destroy Fish. The green Leaves, bruised, and apply'd to recent Wounds, are said to cure them by the first Intention, that is, by uniting their Lips.

CURUTU-PALA. H. M. The Name of a Shrub which grows in *Malabar*. The Bark of the Root bruised, and drank with warm Water, cures a Diarrhoea; and, taken with Milk, is of Service in a Dysentery: Bruised with Water, and apply'd to Apostemations, it is said to resolve them.

CUSCULIA. See CUSCULIA.

CUSCUTA, Offic. Park. Theat. 10. Merc. Bot. 1. 31. Phyt. Brit. 33. Raii Hist. 2. 1903. *Cuscuta major*, C. B. Pin. 219. Raii Synop. 3. 281. Tourn. Inst. 652. Elem. Bot. 513. Dill. Cat. Gill. 143. Rupp. Flor. Jen. 21. Buxb. 89. *Cuscuta sive Cassutha*, Ger. 462. Emac. 577. Mer. Pin. 32. *Cassutha sive Cuscuta*, J. B. 3. 266. Chab. 422. DODDER.

This is a Plant that differs from all others, in having no Leaves, but consisting of a Number of long, slender, red Filaments or Threads, by which it takes hold, and twists about the Plants that are near it, sucking its Nourishment from them. It has several monopetalous or single-leav'd Flowers, divided generally into four short and narrow Segments, to which succeed little round Seed-vessels, containing each four small Seeds. It grows frequently upon Heaths and Commons, upon the Furze and Nettles, as also in the Fields, upon Flax and Tares, doing great Damage, and almost choaking them; whence it is call'd by the Country People *Hell-weed*, and *Devil's-guts*.

Dodder is opening and cleansing, accounted good to purge melancholy and bilious Humours, to open Obstructions of the Liver and Spleen, good for the Jaundice, and serviceable against the Itch.

CUSCUTA MINOR. This is thus distinguish'd:

*Epithymum*, Offic. Park. Theat. 10. *Epithymum sive Cuscuta minor*, C. B. Pin. 219. Raii Hist. 2. 1903. *Cuscuta minor*, Tourn. Inst. 652. Elem. Bot. 513. Rupp. Flor. Jen. 21. *Cuscuta minor*, seu *Epithymum*, Buxb. 89. DODDER OF THYME.

This is reckon'd by some to be a lesser Sort of Dodder, growing upon Thyme, as the larger does upon Nettles, Flax, Tares, and the like. It is composed of a Number of very small Threads, of a reddish-brown Colour, matted together, having frequently the Tops and Stalks of Thyme amongst it, of a pretty strong Scent. It is brought to us from *Leghorn* and *Turky*.

It is accounted a Purger of Melancholy and serous Humours, and to be useful in hypochondriac and melancholy Disorders, and for those affected with the Spleen and Vapours; as also for the Itch, and other cutaneous Distempers.

The only officinal Preparation, taking the Name from this Plant, is the *Decoctum Epithymi*.

The Dodder of Thyme is found upon almost all Plants. It cannot live without their Assistance, for the Roots perish soon after the Seed is come up; and then this Plant, which is nothing but a Tuft of reddish Hairs, nourishes itself by twisting about the neighbouring Plants. Its Fibres do not only embrace them, but fasten themselves strongly to them by rough Nipples. These Nipples insinuate their Points into the Pores of the Bark, burst the Vessels of which it is composed, and receive the extravasated nutritious Juice. The Flowers grow in round Bunches. Each Flower is a little Cup, of about two Lines Diameter, perforated at the Bottom, expanded, cut into four or five Segments, and adorn'd with some very short Chives, loaded with yellow Summits. The Empalement is cut after the same manner with the Petal, and sends forth a Pointal, which fastens itself in the Hole of the Petal, and afterwards becomes a membranous Fruit, almost round, raised with three or four rounded Ribs. This Fruit is perforated at the Bottom, and fastened to a little Capsule at the Bottom of the Empalement, which wraps up the lower Part of the same Fruit: It contains some small brown Seeds. That which is brought from the *Levant*, under the Name of *Venetian Dodder*, does not purge,

as I have experienced several times. It is rather stomachic and aperitive. *Martyn's Tournefort*.

*Decoctum Epithymi*.

#### DECOCTION of DODDER of THYME.

Take of the Chebulan, and Indian Myrobalans, of each half an Ounce; of Arabian Stoechas, and Sena, of each one Ounce; of Funitory, half an Ounce; of Eupatorium, five Drams; of Polypody of the Oak, six Drams; of Turpeth-root, half an Ounce; of Spring-water, two Quarts: Boil all together to one Quart; and then add, of the Dodder of Thyme, and stoned Raisins, of each one Ounce; and give them another Boil together. When taken from the Fire, add of black Hellebore-root, of Agaric, and Salt of Tartar, of each half an Ounce. Let them stand in Infusion together ten Hours, and then press out the Liquor.

CUSPIDATED Plants are such Plants, the Leaves of which are pointed like a Spear.

CUSPIS. Properly the Point of a Spear, but applied to the Glans Penis. Also a sort of Bandage.

CUTAMBULI. Certain Worms, either under the Skin, or upon it, which, by their creeping, cause an uneasy Sensation. Also wandering scorbutic Pains, which are very severe, and cause a Sensation, somewhat like that produc'd by these Worms.

CUTICULA. The Scarf-skin. See CUTIS.

CUTICULARIS MEMBRANA. The Dura Mater.

CUTILÆ. Certain cold Fountains in *Italy*, mention'd by *Celsus* and *Pliny*, which were used as Baths.

CUTIO. A Wood-louse. See MILLEPEDES.

CUTIS. The Skin.

All the Parts of the human Body are invested by several common and universal Coverings, to which Anatomists give the Name of Integuments.

There have been many Disputes about the Number of these Integuments: The Antients reckon'd five, the Epidermis, Skin, Membrana Adiposa, Panniculus Carnosus, and Membrana Musculorum Communis.

The first three of these Coverings are truly common or universal, that is, extended over all the Parts of the Body; but, properly speaking, they ought to be reduc'd to two; for I look upon the Epidermis rather as a Part, or an Epiphysis of the Skin, than as an Integument.

The two other Coverings, mentioned by the Antients, are not universal, but confin'd to particular Parts of the Body.

#### The TRUE SKIN.

The Skin is a Substance of very large Extent, made up of several Kinds of tendinous, membranous, vascular, and nervous Fibres, the Intertexture of which is so much the more wonderful as it is difficult to unfold; for their Directions are as various as those of the Stuff of which an Hat consists.

This Texture is what we commonly call Leather, and it makes, as it were, the Body of the Skin. It is not easily torn, may be elongated in all Directions, and afterwards recovers itself, as we see in fat Persons, in Women with Child, and in Swellings; and it is thicker, and more compact, in some Places than in others.

Its Thickness and Compactness are not, however, always proportionable; for on the posterior Parts of the Body it is thicker, and more lax, than on the fore Parts; and on the Palms of the Hands, and Soles of the Feet, it is both very thick, and very solid. It is generally more difficult to be pierced, by pointed Instruments, in the Belly than in the Back.

The outer Surface of this Substance is furnished with small Eminences, which Anatomists have thought fit to call Papillæ, in which the capillary Filaments of the cutaneous Nerves terminate by small radiated Pencils.

These Papillæ differ very much in Figure and Disposition, in the different Parts of the Body, and they may be distinguished into several Kinds.

The greatest Part of them is flat, of different Breadths, and separated by Sulci, which form a kind of irregular Lozenges. The pyramidal Figure ascribed to them is not natural, and appears only when they are contracted by Cold, Diseases, by Boiling, or by some other artificial Preparation, which alters their ordinary Structure.

The Papillæ of the Palm of the Hand, of the Sole of the Foot, and of the Fingers and Toes, are higher than on the other Parts of the Body; but they are likewise smaller, closely united together, and placed, as it were, endwise, with respect to each other, in particular Rows, which represent on the Skin all kinds of Lines, strait, crooked, waving, and spiral. These several Lines are often distinctly visible in those Parts of the Palm of the Hand which are next the first Phalanges of the Fingers.

The red Part of the Lips is made up of Papillæ, representing very fine Hairs or Villi, closely united together.

There



There is another particular Kind under the Nails; the Papillæ being there more pointed, or, in a manner, conical, and turned obliquely toward the Ends of the Fingers. Those which are found in the hairy Scalp and Scrotum, are still of other Kinds.

The Papillæ of the first and second Kinds appear to be surrounded at their Bases by a soft, mucilaginous, and pretty viscid Substance, which fills the Interstices between them, and represents a kind of Net-work, or Sieve, the Masles or Holes of which surround each Papillæ. This Substance is commonly call'd *Corpus Reticulare* or *Mucosum*.

The Origin of this reticular or mucous Body has not hitherto been sufficiently explain'd; and it has not been determin'd, whether it forms an universal Integument, or whether it belongs more properly to the Skin than to the Papillæ or Epidermis.

To demonstrate this reticular Substance in public Courses, the common Method is to take the boil'd Tongues of Oxen or Sheep; but this Method is fallacious, and may lead the greatest Number of the Spectators into Mistakes.

In Inflammations we observe a reticular Texture of capillary Vessels, more or less extended on the Surface of the Skin; and curious Anatomists demonstrate the same thing, by fine Injections, which may be looked upon as artificial Inflammations. But neither of these Methods proves, that, in the natural State, these Vessels are Blood-vessels; that is, that they contain the red Particles of the Blood.

It is more probable, that its vascular Texture is only a Continuation or Production of the very small Capillaries of the Arteries and Veins, which, in the natural State, transmit only the serous Part of the Blood, while the red Part continues its Course through wider Ramifications, which more properly retain the Name of Blood-vessels.

This vascular Texture is of various Forms and Figures, in the different Parts of the Body. It is not the same in the Face with what it is elsewhere, neither is it alike on all the Parts of the Face, as may be discover'd by the most ordinary Microscopes; and from hence we might, perhaps, be enabled to give a Reason, why one Part of the Body turns red more easily than another.

The inner Surface of the Skin is covered by very small Tubercles, call'd commonly cutaneous Glands; and they are likewise term'd *Glandulæ Miliæres*, because of some Resemblance which they are supposed to bear to Millet-seeds.

These Tubercles are partly fixed in small Fossulæ, in the Substance of the Skin, which answer to the same Number of small Cavities in the *Corpus Adiposum*. Their excretory Ducts open on the outer Surface of the Skin, sometimes in the Papillæ, and sometimes on one Side of them, as may be seen in the Ends of the Fingers, even without a Microscope.

The greatest Part of them furnishes Sweat, and others a fatty oily Matter, of different Thicknesses, as in the hairy Scalp, in the Back, behind the Ears, and at the lower Part of the Nose, where this Matter may be squeez'd out in form of small Worms. On the Head this is call'd Dandriff, and Filth or Nastiness on the other Parts of the Body.

By macerating the Skin in Water, or in any other proper Liquor, these Corpufcles become more visible, especially in the Skin of the lower Part of the Nose, and of the Axilla. The late M. *Duverney* demonstrated to the Royal Academy, that the Structure of some of these cutaneous Glands resembled the Circumvolutions of small Intestines, plentifully stored with capillary Vessels. The illustrious M. *Morgagni*, Professor at *Padua*, has given the Name of *Glandulæ Sebaceæ* to those which furnish the unctuous Matter above-mention'd.

Besides these Corpufcles, there are other small solid Bodies, almost of an oval Figure, contain'd in the Substance of the Skin. These are the Roots or Bulbs from whence the Hairs arise, and some of them are situated within the inner Surface of the Skin.

The Skin has several considerable Openings, some of which have particular Names, such as the Fissure of the Palpebræ, the Nares, the Mouth, the external Foramen of the Ears, the Anus, and Openings of the Parts of Generation.

Besides these, it is perforated by an infinite Number of small Holes, call'd Pores, which are of two Kinds: Some are more or less perceivable by the naked Eye; such as the Orifices of the milky Ducts of the Mammaræ, the Orifices of the excretory Canals of the cutaneous Glands, and the Passages of the Hairs.

The other Pores are imperceptible to the naked Eye, but visible thro' a Microscope; and their Existence is likewise proved by the cutaneous Transpiration, and by the Effects of topical Applications; and, from these two Phenomena, they have been divided into arterial and venous Pores.

We ought likewise to observe the Adhesions and Folds of the Skin. It is every-where united to the *Corpus Adiposum*; but it adheres to it much more closely in some Parts than in others, as in the Palm of the Hand, Sole of the Foot, Elbow, and Knee.

Some Plicæ, or Folds in the Skin, depend on the Structure of

the *Membrana Adiposa*, or *Cellularis*, as those in the Neck and Buttocks; others do not depend on that Membrane, such as the *Rugæ* in the Forehead and *Palpebræ*, which are form'd by cutaneous Muscles, and disposed more or less in a contrary Direction to these Muscles. These Folds increase with Age.

There is, besides, a particular kind of Folds in the Elbow, Skin of the Knee, and Condyles of the Fingers and Toes, which are owing neither to the Conformation of the *Membrana Adiposa*, nor to any Muscle.

Lastly, there is a kind of Plicæ, or rather Lines, which cross the Palm of the Hand, Sole of the Foot, and corresponding Sides of the Fingers and Toes, in different Directions.

#### The CUTICULA, or EPIDERMIS.

The Outside of the Skin is covered by a thin transparent Web, closely joined to it, which is call'd Epidermis, Cuticula, or the Scarf-skin.

The Substance of the Cuticula appears to be very uniform on the Side next the Skin, and to be composed, on the other Side, of a great Number of very fine, small, squamous Laminæ, without any Appearance of a fibrous or vascular Texture, except some small Filaments, by which it is connected to the Papillæ, and which perhaps are detach'd from thence.

This Substance is very solid and compact, but yet capable of being extended and thicken'd, as we see by steeping it in Water, and by the Blisters raised on the Skin by Veficatories, or any other Means; and from thence it should seem, that it is of a spongy Texture. It yields very much in Swellings, but not so much as the Skin, without breaking or cracking.

The Origin of the Epidermis is as obscure as its Regeneration is evident, sudden, and surprizing; for let it be destroy'd ever so often, it still grows again. It probably arises from a Substance which transudes from the Papilla, and therefore the Antients were in the right to call it an Efflorescence of the Skin.

We must not, however, imagine, that it is the Air which dries this mucilaginous Matter, and gives it the Form of the Epidermis; because it is found equally in the Fœtus, which swims continually in Water; and it grows even on the Palate, when it has been destroy'd by too hot Food; and under Plaisters applied to any Part of the Body.

Hard and reiterated Frictions loosen it insensibly, and presently afterward a new Stratum arises, which thrusts the first outward, and may itself be loosen'd, and thrust outward by a third Stratum, and so on.

It is nearly in this manner that Callosities are formed on the Feet, Hands, and Knees; and the several Laminæ or Strata, observable at the same time on many other Parts of the Body, are owing to the same Cause, tho' many Anatomists have look'd upon them to be natural. It must be acknowledged, however, that, on the Palms of the Hands, and Soles of the Feet, the Epidermis is commonly thicker than on any other Part.

The Epidermis adheres very closely to the cutaneous Papillæ, from which it may be separated by Boiling, or, which is a much better Way, by steeping for a long time in cold Water. It is not impossible to separate it with the Knife; but this Management teaches us nothing of its Structure.

It adheres still closer to the *Corpus Reticulare*, which is easily raised along with it; and they seem to be true Portions or Continuations of each other.

It is generally believed, that the Colour of the Epidermis is naturally white, and that the apparent Colour thereof is owing to that of the *Corpus Mucosum*. But, when we examine separately the Epidermis of Negroes, we find no other Whiteness in it, than in a thin transparent Lamina of black Horn.

The Epidermis covers the Skin thro' its whole Extent, except at the Places where the Nails lie. It is mark'd with the same Furrows and Lozenges as the Skin, and has the same Openings and Pores; and though it may be said to pass the Bounds of the Skin, where it is continued inward, through the great Openings, yet, at these Places, it loses the Name of Epidermis.

When we examine narrowly the small Pores or Holes through which the Sweat passes, the Epidermis seems to insinuate itself into these, in order to complete the excretory Tubes of the cutaneous Glands. The Fossulæ of the Hairs have likewise the same Productions of the Epidermis; and it seems to give a sort of Coat or Bark to the Hairs themselves. Lastly, the almost imperceptible Ducts of the cutaneous Pores are lined by it.

Having macerated the Skin for a long time in Water, the Epidermis, with all its Elongations, may be separated from it; and, in that Case, these Productions carry along with them the Hairs, the Bulbs, and even the axillary Glands.

By this Observation we may explain, how Blisters may remain for a long time on the Skin, without giving Passage through these Holes, to the Matter which they contain; which Holes ought to be increased, one would think, by the Dilatation and Tension of the Epidermis.

For when the Epidermis is separated from the Skin, it carries along with it some Parts of these cutaneous Fibres, which being



being compress'd by the Matter contained in the Blister, shut the Pores of the separated Epidermis, like so many Valves; and it is probably these small Portions which have been taken for Valves of the cutaneous Tubes.

#### USES OF THE SKIN.

It is principally and properly the filamentary Substance, call'd the Body of the Skin, which is the universal Integument of the Body, and the Basis of all the other cutaneous Parts, each of which has its particular Uses.

The Skin is able to resist external Injuries to a certain Degree, and such Impressions, Frictions, and Strokes, to which the human Body is often liable, as would hurt, wound, and disorder the Parts of which it is compos'd, if they were not defended by the Skin.

The Papillæ are the Organ of Feeling, and contribute to an Evacuation, call'd insensible Transpiration. They likewise serve to transmit from without, inwards, the subtle Particles or Impressions of some Things applied to the Skin. The first of these three Uses depends on the Extremities of the Nerves; the second, on the arterial Productions; and the third, on the Productions of the Veins.

The cutaneous Glands secrete an oily Humour of different Consistences, and they are likewise the Origin of Sweat. But, without the Epidermis, both Papillæ and Glands would be disturb'd in their Functions, on which great Disorders must ensue.

In order to explain the Mechanism of Feeling, or of the Touch, we should first be made acquainted with the Senses in general, for which this is not a proper Place; and, therefore, all that I shall observe here is, that there are at least two Sorts of Feeling, one general, the other particular.

Particular Feeling is accompanied with a certain determinate Impression, by which we are enabled to discern Objects in a very distinct Manner, and this is properly what is call'd the Touch; the proper Organ of which is at the Inside of the Ends of the Fingers. General Feeling is indeterminate and indistinct, not being accompanied with the same Impression as the former.

These Differences in the Sense of Feeling, depend on those of the Papillæ, which, in Effect, appear to be more close, and made up of a greater Number of nervous Filaments, at the Ends of the Fingers, than any-where else; for the nervous Ropes that go to the Fingers, are proportionably larger than those that go to any other Part of the Body.

The Epidermis serves to keep the Pencils, or nervous Filaments of the Papillæ, in an even Situation, and without Confusion; and it likewise moderates the Impressions of external Objects. Particular, as well as general Feeling, is more or less perfect, in proportion to the Thinness of the Epidermis; Callosities in which weaken, and sometimes destroy, both.

Another Use of the Epidermis is, to regulate the cutaneous Evacuations already mentioned; the most considerable of which is insensible Transpiration. By this we understand a fine Exhalation, or a kind of subtle Fume, which flows out of the Body imperceptibly, and in different Quantities. It might be call'd cutaneous Transpiration, to distinguish it from pulmonary Transpiration.

This cutaneous Exhalation becomes sensible, by applying the End of the Finger, or Palm of the Hand, to the Surface of a Looking-glass, or of any other polish'd Body; for it presently looks dull, and appears to be cover'd with a condensed Vapour. It seems to me, that the convex Side of the Hand and Fingers does not furnish so great a Quantity of this Exhalation, as the Palm of the Hand, and the Inside of the Fingers, especially the Extremities, which points out one Use of this Transpiration; which is, to keep the nervous Filaments in due Order for particular Feeling.

Another Proof of insensible Transpiration is the famous Experiment of *Sanctorius*, continued for thirty Years without Interruption; by which he found, that this Evacuation, in one Day, was equal to all the sensible Evacuations for fifteen Days.

This Calculation is not agreeable to what has been made in other Countries; particularly those from the like Experiments made by *M. Dodart*, and *Morin*, of the Royal Academy of Sciences; and by *Dr. James Keill*, as publish'd in his *Statice Britannica*. Neither can the Balance inform us, whether the cutaneous Transpiration is greater or less than the pulmonary.

A long time ago, I discover'd a Method to render this Transpiration visible, to the Distance of about half a Foot from the Body; and I mention'd it in a Thesis printed at *Copenhagen*. If we look at the Shadow of a bare Head, on a white Wall, in a Sun-shiny Day, and in the Summer Season, we shall perceive, very distinctly, the Shadow of a flying Smoke, rising out of the Head, and mounting upward; though we cannot see the Smoke itself. We may try the same Experiment with a Dog or Powl.

V O L. II.

It is much in the same manner, that the invisible Exhalations from burning Charcoal throw a very distinct Shadow; and that the invisible Smoke of a Chafing-dish, Warming-pan, or Stove, make all distant Objects appear trembling, when view'd either over, or on either Side of those Utensils.

The insensible cutaneous Evacuation is perform'd simply, and without any Artifice, through the small Pores already mentioned, much in the same manner as we observe the Smoke to arise from the Entrails of an Animal newly kill'd and open'd. It is a particular and continual Discharge of the Serum of the Blood through the capillary Vessels of the Skin.

It is naturally very moderate, and it is more abundant in the Summer, before a good Fire, after strong Exercise, and during the Distribution of the Chyle, than in the Winter, in cold Places, during Inaction, and before Meals.

The transpir'd Matter appears to be, in some Degree, saline, as may be observ'd by applying the Tongue to the Palm of the Hand, when it has not been wash'd lately. This is, perhaps, the Reason, why we feel less Pain when a Wound is touch'd with the Finger cover'd with Silk, than with the naked Finger; but this Inconveniency might easily be prevented by washing the Hands and Fingers very well, immediately before we begin to dress Wounds.

The Matter of the other two Evacuations, the Sweat, and thick oily Substance, comes principally from the Glands of the Skin. Each of them differs according to the different Parts of the Body where they are found, as may be observ'd both of the Filth and Sweat of the Head, Armpits, Hands, and Feet.

This Filth or Nastiness of the Skin is an unctuous or fatty Matter, collect'd insensibly on the Epidermis, where it thickens, and forms a sort of Varnish, which in time becomes prejudicial, by stopping up the Passages of cutaneous Transpiration.

This Collection is more readily made in Winter, than in Summer; and this is the Reason why it is more difficult to keep the Hands clean in cold, than in warm Weather. *Winflow*.

CYAMUS. A Bean. See *FABA*.

*Cyamus* also signifies a Woodlouse roll'd up in the Form of a Bean; which Form these Insects put themselves into, upon the Apprehension of any Danger.

CYANUS. The Blue-bottle.

The Characters are,

The Extremity of the Pedicle runs into a very scaly Calyx, and the Sides of the Scales are hairy; the Disk is almost flat and fungous, on which grow oblong, and almost cylindrical Ovaries, surrounded with an Annulus, or Ring, on the upper Part, on which stand erected downy Hairs. Within these Hairs, round the Border of the Ovary, grows a large Flower, tubulous, and running into the Figure of a *Cornu copie*. These Flowers are almost always barren, having no Tube or Stamina. The interior Flowers are less tubulous, bellied on the upper Part, with a quinquesfid Border; from the inferior Part of these Flowers, on the Inside, arise Stamina, which, uniting in a Tube, closely embrace a long Pointal, furnish'd with a bifid Apex, and proceeding from the Centre of the Apex of the Ovary. The Floscules which constitute the Border of the greater Flower, are of a larger Size, monopetalous, and, in a manner, bilabiated; the Floscules about the Middle are less, and equally divided. *Boerhaave, Ind. alt.*

1. *Cyanus*; *montanus*; *latifolius*; *vel verbaeculum Cyanoides*. *C. B.* 273. *Boerb. Ind. A.* 145. *Cyanus major*. *Offic. Ger.* 592. *Emac.* 732. *Raii Hist.* 1. 322. *Cyanus major vulgaris*. *Park.* 481. *Cyanus hortensis*. *Tourn. Inst.* 447. *Cyanus Alpinus radice perpetua*. *J. B.* 3. 23. *Chab.* 340. *Hist. Oxon.* 3. 134. GREAT BLUE-BOTTLE.

The Leaves of this Blue-bottle are but three or four Inches long, and about an Inch broad, sharp-pointed at the Ends, not at all serrated about the Edges, of a green Colour above, and white and woolly underneath. It grows about a Foot or more high, bearing at the Top of the Stalks (which are not much branched) scaly Heads, each of whose Scales is border'd with a black Edge; their Heads are thinly set about with a Row of hollow wide-mouth'd Flowers, jagged at one End, and slender and narrow at the other, of a deep-blue Colour, set about a reddish-purple Thrum. The Seed is round and long, inclosed in Down. It grows in Gardens, and flowers in *June*. The Leaves and Flowers are the Parts in Use, and those but seldom.

This is reckon'd among the vulnerary Plants; the Juice being commended against Bruises and Contusions from Falls, though a Vein be broken, and the Party spit Blood; as also to heal any Cut, or green Wound.

2. *Cyanus*; *angustiore folio & longiore*; *Belgicus*. *H. R. Par. M. H.* 3. 134. THE GREATER NARROW-LEAV'D BLUE-BOTTLE, OR GLOBE-FLOWER.

3. *Cyanus*; *floridus*; *odoratus*; *Turcicus*; *sive Orientalis*; *major*. *Park. Theat.* 481. *M. H.* 3. 134. a. THE PURPLE SWEET SULTAN.



4. Cyanus; floridus; odoratus; Turcicus; five Orientalis; major; flore albo. *H. R. Par. M. H.* 3. 134. a. THE WHITE SWEET SULTAN.

5. Cyanus; floridus; odoratus; Turcicus; five Orientalis; major; flore incarnato. *H. L. a.* SWEET SULTAN WITH A PALE FLOWER.

6. Cyanus; floridus; odoratus; Turcicus; five Orientalis; major; flore luteo. *H. L. a.* THE YELLOW SWEET SULTAN.

7. Cyanus; segetum; flore cœruleo. *C. B.* 273. *Tourn. Infl.* 446. *Boerb. Ind. A.* 145. *Cyanus minor*. *Offic. Cyanus minor*, *Baptifecula*. *Mont.* 38. *Cyanus vulgaris*. *Ger.* 592. *Emac.* 732. *Cyanus minor, vulgaris*. *Park.* 482. *Cyanus Segetum vulgaris minor annuus*. *Hist. Oxon.* 3. 134. *Cyanus*. *J. B.* 3. 21. *Chab.* 340. *Dill. Cat.* 96. *Raii Synop.* 81. *Hist.* 1. 321. SMALL BLUE-BOTTLES.

The small Blue-bottle grows to be two or three Foot high, and is much more divided into Branches than the great Blue-bottles, with many slender whitish-corner'd Stalks; the lower Leaves are long and narrow, having three or four long Laciniae set on each Side, green above, and whitish underneath. Those which grow on the Stalks, are more narrow and Grass-like, and wholly white, without any Laciniae; on the Tops of the Stalks grow smaller scaly Heads, more thickly beset with Flowers, in Shape like the great Blue-bottle, but much shorter, of a pure azure Blue. The Seed is small, white, and shining. The Root is woody, with many Fibres, perishing yearly. It grows every-where among the Corn, flowering in June and July.

*Camerarius* affirms, that in Saxony they give a Glass of Beer, in which a Handful of it has been boil'd, to those who have the Jaundice, and Retention of Urine. The same Author bathed the Gums of young Children with the distil'd Water of the Cyanus, mix'd with the Juice of Cray-fish, to make them cut their Teeth easy: The Powder of this Plant, according to the same Author, resolves the *St. Antony's Fire* in the Face. *Tragus* says, that half a Dram of the Powder of the Seed of Blue bottles is a pretty good Purge; and that the distil'd Water of its Flowers is excellent for the Redness and Inflammation of the Eyes; some Saffron and Camphire may be added to this Water, to render it more active. In fine, the Decoction of Cyanus is diuretic and emmenagogic. *Martyn's Tournefort*.

According to *Ettmuller*, the Root of this Plant, kept in one's Hand till it becomes warm, is by some said to stop Hæmorrhages of the Nose; and, if it is gather'd on the twenty-eighth Day of May, call'd *Corpus Christi Day*, all Hæmorrhages whatever. According to *Tragus*, half a Dram of its Root, reduced to Powder, and exhibited internally, evacuates the Bile by Stool. According to *Pontedera*, it abounds with resinous Parts; for which Reason some, when the Intention is to purge, exhibit a Dram and an half of its Powder in some proper Liquor.

The Flowers are used in Medicine, and have many repugnant, and in *Geoffroy's* Opinion, uncertain and precarious Virtues ascrib'd to them: Thus, for Instance, they are said to be exhibited with Success, in order to extinguish feverish Heats; to prevent the bad Effects arising from the Stings and Bites of venomous Animals; to resist Putrefaction, and remove Contagion. They are also said to be beneficial to those who are disorder'd by Falls from Eminences, and Contusions, and to such as, by any Misfortune whatever, have internal Concretions of Blood. By some Authors, they are recommended in the Jaundice, the Dropsy, Suppressions of Urine, Retentions of the Menfes, the Itch, and Ulcers of all Kinds. *Tragus* informs us, that the Flower and Seeds, made into a Decoction with Wine, and drank, are an excellent Remedy against the Wounds inflicted by Spiders and Scorpions. One Dram of the Flowers and Heads reduced to a Powder, and exhibited for some time in Wine, is by some extol'd as a Remedy of singular Efficacy in the Jaundice. According to *Camerarius*, the Natives of Saxony boil a Handful of the Flowers in Ale and Butter; which Preparation they exhibit in the Jaundice, and Suppressions of Urine. *Hoffman*, in his *Chavis Schroderiana*, informs us, that he found a Decoction of the Flowers effectual for carrying off the Waters by a Diaphoresis in a beginning Dropsy; and, that the same Effect was produced by them in a confirm'd Dropsy, we find in the *Ephemerides*, *Nat. Curios. Decad.* 3. a. 5. o. 20. The celebrated *Frederic Hoffman*, in his *Dissertatio de Remed. Domesticorum Præstantia*, affirms, that, in a Suppression of Urine, nothing is more effectual for promoting its free Discharge, than a Decoction of the Flowers of the small Blue-bottle, especially when mix'd with Nettle-seeds. According to *Ettmuller*, the Flower, either alone, or in Conjunction with the Flowers of Larkspur, infused in Wine, or made into a Decoction with Water, gently provokes Urine, the Menfes, and Lochia, when suppress'd. Hence *Agricola*, in his *Chirurgia Parva*, recommends a Decoction of the Flowers of Blue-bottle, and Larkspur, in all Disorders of the Urine. And if to these the Flowers of Marigold are added, the Decoction

will be appropriated to Diseases of the Uterus. Putrid Ulcers are said to be cured by dropping the express'd Juice of the Flowers into them, or sprinkling them with their Powder. Linen Cloths, says *Pontedera*, impregnated with the Juice of these Flowers, are to be applied to putrid Ulcers; by which Remedy, the Ulcer is not only cleansed, but the Contagion hinder'd from spreading to the adjacent Parts. According to *Baubine*, the Juice of this Flower, if used as a Gargle, contributes to the Cure of putrid Ulcers in the Mouth. The same Author also informs us, that the Italian Women use a Fumigation of these Flowers, in order to remove a Strangulation of the Uterus. According to *Camerarius*, the Flowers and Heads dried, and reduced to a Powder, are, with uncommon Success, sprinkled upon an Erysipelas. These Flowers are so efficacious in quickening the Sight, that they are by some said to render the Use of Spectacles and Microscopes superfluous; for, according to the celebrated *Boerhaave*, when gently dry'd in a Shade, where the Air is not moist, and either reduced to a Conserve with Sugar, or used by way of Infusion, like Tea, they are singularly beneficial; first, in Cases where the Eyes are darken'd, and render'd dull, by a Superfluity of thick and sordid Moisture. Secondly, in Cases where the natural Humours of the Eye are inspissated, and become too viscid. And, thirdly, in Cases where the Intention is to remove Lippitude. *Timæus* affirms, that in hot, saline, and acrid Defluxions of the Eyes, singular Relief is afforded by a Liquor prepared in the following Manner:

Take of the Flowers of Blue-bottle, gather'd before the Rising of the Sun, as much as you please: Bruise them in a Marble Mortar; put them into a wide-mouth'd Glass Vessel, which is to be close-stop'd, and expos'd to the Heat of the Sun for a whole Month. Then let the Glass be cover'd over with Leaven, put into a Baker's Oven, and bak'd along with Bread; by which means an excellent ophthalmic Oil, or rather Liquor, will be yielded.

The Water of the Flowers of Blue-bottle, distil'd with common Water, is by many extol'd as an efficacious Remedy for Inflammations, Redness, and Lippitude of the Eyes; as also for quickening and strengthening the Sight, if the Eyes are frequently wash'd with it every Day; but it is still more efficacious in removing Inflammations of the Eyes; if, as *Tournefort* advises, a proper Quantity of Saffron and Camphire are added to it. *Ettmuller* informs us, "That the Water of Blue-bottle-flowers may serve as a Vehicle, when, in a Suppression of Urine, and in the Stone, an Emulsion of the Seeds of Violets is to be exhibited. The external Use of these is said to be of singular Advantage in all Disorders of the Eyes, especially those arising from the Small-pox. The Water of Blue-bottle-flowers, mix'd with that of Chervil, is an excellent Remedy in Cataracts, when applied warm with Linen Cloths; but it will be more efficacious, if a little, either of Camphire or Saffron, is mix'd with it." With this Water, the Juice is extract'd from a live Crab bruised, for anointing the Gums of Children in Dentition. This Water, for Disorders of the Eyes, ought, according to *Geoffroy*, to be prepar'd in the following Manner:

Take any Quantity of the Flowers of Blue-bottle, gather'd with their Calices; bruise and macerate them for twenty-four Hours in a sufficient Quantity of Snow-water; then distil in a gentle Sand-heat. The Water, yielded, is that celebrated Water, to which the French have given the Name of *Eau de Cassé-Lunette*.

The celebrated *Fabregeon* informs us, that a Water distil'd from the Flowers of Blue-bottle, in Conjunction with Eye-bright, is an excellent Remedy for Inflammations of the Eyes; and if an Addition is made of Musk, Benjamin, and Orange-flowers, he recommends it for procuring a florid Colour of the Countenance, especially when mix'd with Virgin-honey. Some Authors are of Opinion, that this Plant, and more especially its Flowers, are astringent and drying, like Plantain, and that they consequently act by refrigerating. But *Caspar Hoffman*, in his *Treatise de Medicamentis Officinalibus*, seems, with more Justice, to maintain the contrary Opinion, in the following Words: "The Bitterness, which is sufficiently manifest, as also the acrid Taste of the Leaves, are sufficient Proofs, that the Cyanus is not cold, but hot: The penetrating and deobstruent Virtues of a Decoction of it in Wine, or Ale, in Dropsies, the Jaundice, in Falls from Eminences, Contusions, and Cases where there are internal Concretions of Blood, are also sufficient Proofs of its hot Qualities, which are still confirm'd by its Power of evacuating the Waters in Dropsies, which I have experienced during a long Course of Practice." For 'tis cer-

tain,



tain, that the bitter and acrid Taste discovers Qualities which act by stimulating, resolving, and opening; provided the above-mention'd Effects are founded upon genuine and real Observations. *Geoffroy*, upon subjecting the Flowers of the *Cyanus* to a chymical Analysis, found that they yielded a large Quantity of an acid, and somewhat austere Phlegm, a small Quantity of an urinous Spirit, a considerable Quantity of an Oil as thick as an Extract, some fix'd alkaline Salt, and some Earth. The Flowers have but a very faint Smell, and a subastringent Taste; from which Circumstance they seem to contain an essential vitriolico-tartareous Salt, mix'd with a large Quantity of Oil. Of these Flowers there are several Shop-Preparations, such as the *Aqua Ophthalmica insignis* in *Lenery's Pharmacopœia universelle*, the *Potio Philomedica* in the *Collectan. Leydensis*, and some others, sufficiently celebrated for their Virtues.

I shall take notice of another Use of this Plant, which, tho' it does not belong to Medicine, is curious, and may be turn'd to some Advantage, in Countries where there is great Plenty of the *Cyanus Segetum Flore cœruleo*. According to *Mr. Boyle*, the recent Flowers of this Plant yield a Juice, which, when immediately express'd, assumes a pretty deep and agreeable bluish Colour, and which, by dropping Spirit of Salt into it, is chang'd into a reddish Colour; but, by the Addition of a strong Solution of alkaline Salt, instead of the acid Spirit, it assumes a grateful greenish Colour. *Gottschedus*, in his *Flora Prussica*, acquaints us with the Uses, to which they are applied by Painters, in the following Words: "These Flowers are to be bruis'd in a Stone Mortar, with a wooden Pestil, with the Addition of a small Quantity of Alum. A Part of the Leaves thus bruis'd are wrapt up in a clean Linen Cloth; then another Portion of them is wrapt up in another Part of the same Cloth; and thus the Whole of the Flowers are to be dispos'd of, Layer above Layer. Then the Portions thus wrapt up are to be gently press'd with the Hand, that the whole Cloth may be equally impregnated with the Juice; then the Flowers are thrown away, and the Cloth, when dry'd, is immers'd in a small Quantity of Water, in which Gum Arabic has been dissolv'd; by which means the Water assumes a beautiful bluish Colour."

8. *Cyanus*; segetum; flore albo. *C. B. P.* 273. *H. Eyst. Æst. o. 7. F. 7. Fig. 3. a.* CORN BLUE-BOTTLE, WITH A WHITE FLOWER.

9. *Cyanus segetum*; flore purpureo. *C. B.* 273. *H. Eyst. Ibid. Fig. 4. a.*

10. *Cyanus*; segetum; flore incarnato. *C. B. P.* 273. *H. Eyst. Ibid. Fig. 2. a.*

11. *Cyanus*; segetum; flore violaceo. *C. B. P.* 273. *a.*

12. *Cyanus*; segetum; flore rubro. *H. Eyst. Ibid. Fig. 5. a.*

13. *Cyanus*; segetum; flore albo, fundo immaculati candoris. *H. R. Par. a.*

14. *Cyanus*; segetum; flore ex albo violaceo. *Tabern. Ic.* 148. *a.*

15. *Cyanus*; segetum; flore albo, umbilico cœruleo, violaceo, purpureo. *II. Eyst. Ibid. Fig. 6. a.*

16. *Cyanus*; segetum; flore albo, fundo purpureo. *C. B. P.* 273. *H. Eyst. Ibid. Fig. 7. a.*

17. *Cyanus*; segetum; flore albo; fundo carneo. *II. R. Par. a.*

18. *Cyanus*; segetum; flore albo, fundo atropurpureo. *H. R. Par. a.*

19. *Cyanus*; hortensis; flore pleno, cœruleo. *C. B. P.* 274. *a.*

20. *Cyanus*; hortensis; flore pleno, purpureo. *C. B. P.* 274. *a.*

21. *Cyanus*; hortensis; flore pleno medio, purpureo. *C. B. P.* 274. *a.*

22. *Cyanus*; frutescens; Hispanicus.

*Boerb. Ind. alt. Plant. Vol. 1.*

CYAR, *κῶας*. The Eye of a Needle, or the Orifice of the internal Ear.

CYATHISCUS, *κυαθίσκος*. The hollow Part of a Probe, form'd in the Shape of a small Spoon, as in an Ear-picker.

CYATHUS, *κῶας*, so call'd from the Verb *χύνω*, to pour out. It was a common Measure, both of the liquid and dry Kind, among the *Greeks* and *Romans*, and contain'd the sixth Part of a *Cotula*, or the twelfth Part of a *Sextarius*; for the *Sextarius*, as well as the *As*, was divided into twelve *Cyathi*, each of which is equivalent to an Ounce: Hence the *Sextans* was equal to two *Cyathi*, the *Quadrans* to three, the *Triens* to four, the *Quincunx* to five, the *Semis* to six, the *Septunx* to seven; the *Bes* to eight, the *Dodrans* to nine, the *Dextans* to ten, and the *Denus* to eleven. These were the several Names given to the Cups or Vessels, which contain'd two, three, four, or more *Cyathi*. The least Vessel was therefore a *Cyathus*, which was a kind of Ladle, with which they took Wine, or any other Liquor, out of Bowls, and pour'd it into Cups, for one Draught, as is observ'd by *Cas-*

*aubon in Athen. Lib. 8. Cap. 9.* Hence *Plautus* in his *Mœchimus* uses the Word *Cyathiffare*, for measuring any Liquor in *Cyathi*. This the *Greeks* call'd *κῶασις*, which they appropriated to those, who did not, at one Draught, drink whole *Sextarii*, but, by repeated Evacuations of the *Cyathus*, fell upon Means to intoxicate themselves. From the Smallness of the *Cyathus* those are proverbially said to measure the Sea in a *Cyathus*, who undertake impracticable Things. In these earlier Ages, the *Cyathus*, or one Ounce, was not the Measure appropriated to the Abstemious and Valetudinary, but the *Sextans*, or two Ounces. Besides, the Cups most generally us'd for common Drinking were the *Trientes*, which contain'd four *Cyathi*, or Ounces. The *Denus*, on the contrary, which contain'd eleven Ounces, was the Cup us'd by the Toppers, who drank it off at one Draught. Hence *Suetonius* in *Cap. 77.* commends *Augustus Cæsar*, for his Frugality and Temperance, because, after Supper, he only drank three *Sextantes*, which were equivalent to six *Cyathi*, or Ounces; and, even when he was inclin'd to indulge himself over the social Bowl, he is said never to have exceeded six *Sextantes*, or twelve *Cyathi*. It was also customary among the *Romans*, when they were inclin'd to indulge themselves at any Entertainment, to drink as many *Cyathi*, as there were Letters in the Name of their Patron, whether Man or Woman. This Practice, together with that of drinking nine *Cyathi*, in Honour of the Nine Muses; and three, in Honour of the three Graces, are alluded to in several Passages of the *Latin* Classics.

Both among the *Greeks* and *Romans*, the *Cyathus* was a dry, as well as a liquid Measure. Thus *Pliny*, in *Lib. 21. C. 34.* informs us, that the *Cyathus* of the *Greeks* weigh'd ten Drams. *Galen*, in his *Treatise de Pomis et Mensuris*, *Cap. 15.* asserts the same; but in *Cap. 4, 13, and 14.* he informs us more explicitly, that a *Cyathus* contains twelve Drams of Oil; thirteen Drams and one Scruple of Wine, Water, and Vinegar; and eighteen Drams of Honey. In the twelfth Chapter also of the same Book, he tells us, that among the *Veterinarii*, a *Cyathus* consist'd of two Ounces. The modern Physicians make a *Cyathus* contain an Ounce and an half.

CYBITON, *κῶβιτον*. See CUBITUS.

CYBIUM, *κῶβιον*. A large Sea fish, cut into cubical Slices. *Pliny.*

CYBOIDES, *κῶβοειδής*. See CUBOIDES.

CYCEON, *κυκεών*, from *κῶα*, to mix. Among *Latin* Authors it is call'd *Cimmon*, and is commonly said to have been a Mixture, of the Consistence of a Pap, us'd by the *Greeks*, and compos'd of Wine, Honey, fine Flour, Water, and Cheese. In these remote Ages there seem to have been two Kinds of it; a less valuable one, compos'd of a Mixture of Water and Meal; and another, more rich and delicate, made up of Wine, various Kinds of Meal, Cheese, and sometimes Honey. In the Account *Homer*, in *Iliad. 11.* gives us of *Hecamede's* preparing *Cyceon*, ras'd Cheese and Barley-meal [*ῥιζοῦ ἀλάρτου*, which *Casaubon* in *Athen. L. 11. C. 12.* explains by *Polenta*, or fine Flour] are only mix'd with Wine, without the least Mention of Honey and Water. And *Ovid*, in the fifth Book of his *Metamorph.* when speaking of the Draught of *Cyceon*, presented by an old Woman of *Athens* to *Ceres*, only makes mention of Water, mix'd with fine Flour. Hence 'tis obvious, that the *Cyceon* consist'd of Water mix'd with Meal alone; for the *Polenta* only differs from the *Farina Hordei*, in that the former is dry'd. If we consult the Writings of *Hippocrates*; we also find, that he gave the Name of *Cyceon* to a Mixture of Water and Meal; for in his second Book *de Dieta*, after having treated of the Virtues of a certain Mixture of fine Flour, and Water, or Wine, he adds the following Words: "But a *Cyceon*, prepar'd with Water alone, refrigerates and nourishes; when prepar'd with Wine, it heats, nourishes, and renders the Patient collive; when prepar'd with Honey, it is less heating and nourishing, but more purgative, if the Honey is genuine and unadulterated; but if it is otherwise, it is so far from purging, that it rather renders collive. All *Cyceons*, prepar'd with Milk, are highly nourishing; but, with that of Sheep, it renders collive; with that of Goats, it is more purgative; with that of Cows, less; and that of Mares and Asses, more." *Janus Cornarius*, in his Interpretation of this Passage, after the Words *all Cyceon*, inserted, *that is, of Meal*, intending, no doubt, by the Addition, to insinuate, that Meal alone, of any Kind, was sufficient to make a *Cyceon*, when mix'd with any Liquor; at least, from the Text we may without any Constraint infer, that in those Days, not only Water and Wine, but also several Species of Milk, were us'd in preparing *Cyceons*. *Galen*, in the ninth Chapter of his first Book *de Alimentorum Facultat.* does not hesitate to give the Name of *Cyceon* to that ordinary Pisan which some prepare, by mixing Rob, Honey, and Cumin, with Water which has been a little boil'd. That Salt was also an Ingredient



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dent sometimes us'd in *Cyceons*, we may gather from *Hippocrates*, in some Passages of whose Works an unsalted *Cyceon* is said to be an attenuating Diet. The Seeds of white Poppy and Linseed were also us'd by *Hippocrates* in preparing *Cyceons*, as we find in his Book *de Dieta*. From what has been said, 'tis obvious, that the *Greeks* by the Word *Cyceon* understood any miscellaneous Draught, or confus'd Mixture, prepar'd of Ingredients of different Natures, according to the Design and Intention of the Physician. Hence *Cyceon* is proverbially us'd for a turbulent and perplex'd State of Affairs, as also for a Person who turns all Things topsy-turvy. *Charterius* explains the *κυνέω* by *Moretum*, which, among the Antients, was a kind of Sallad, made of Herbs, Milk, Wine, Oil, Cheese, and Garlick. *Duretus*, in his Commentary upon the Book of Regimen in acute Diseases, takes *Cyceon* for a certain Aliment prepar'd of a Mixture of Milk, Honey, Water, Wine, and Cheese; to which *Heurnius* also adds, Herbs. *Hieronymus Mercurialis* is of Opinion, that the *Cyceon* was a certain Species of Aliment prepar'd of Meal, Eggs, Honey, Wine, and Cheese. As for the medicinal Virtues of *Cyceons*, 'tis certain that nothing general can be advanc'd, which extends to all Preparations of this Kind, since, in the very Nature of the Thing, we must judge of their Virtues from the Qualities of their Ingredients. We have already seen what Distinctions *Hippocrates* made with respect to this Affair: But, when he speaks simply of *Cyceon*, 'tis highly probable he only meant a Mixture of fine Flour with Wine: Thus, for Instance, when in the sixth Book of his *Epidemics*, Sect. 6. he recommends a *Cyceon* against Pains, he means a Mixture of Meal and Wine. In his second Book *de Morbis*, he orders a like *Cyceon* to be drank in a *Hydrocephalus*, after the Exhibition of a Vomit: But when, for Patients labouring under a quartan Fever, he intends an aqueous, and not a vinous Draught, he adds, *Let the Patient drink a Cyceon prepar'd with Water*. When the *Cyceon* is to be compos'd both of Water and Wine, as also of other Ingredients besides the Meal, he explicitly mentions these Ingredients. Thus in his Treatise *de internis Affect.* when the Patient is afflicted with Thirst, after Evacuations, and the Use of the Bath, he orders him to drink a cold *Cyceon* prepar'd of black austere Wine, mix'd with an equal Quantity of Water: And in his first Book *de Morbis Muliebr.* thinking that medicated Aliments, of a drying Quality, contributed to the Cure of Exulcerations of the Uterus, he orders the Exhibition of a thick *Cyceon* prepar'd of Cheese, roasted Linseed, fine Flour, white Poppy-seeds, and thin austere Wine. In his Treatise *de internis Affect.* for such as labour under Consumptions, he orders what he calls a *florid Cyceon*, prepar'd of the Roots of Smallage, Dill, Rue, Mint, Coriander, young Poppies, Basil, Lentils, the Juice of sweet and vinous Pomegranates, black austere Wine, the Meal of Vetches, and fine Flour; together with the Shavings of old Cheese, made of Goats-milk.

CYCIMA, Litharge. *Rulandus*.

CYCLAMEN. Sow-bread. See ARTHANITA.

CYCLISMUS. A Troche. It signifies, also, a sort of Rugine, of a circular Form.

CYCLOPION, κυκλώπιον. The White of the Eye.

CYCLOS, κύκλος. A Circle. But in *Hippocrates* it imports the Cheeks, and the Orbits of the Eyes.

CYCLUS METASYNCRITICUS. See DIATRITAS, and METASYNCRISIS.

CYCNARION, κυκνέριον. The Name of a Collyrium, mentioned by *Galen*, and *Paulus Aegineta*. It was so call'd because of its white Colour, resembling that of a Swan.

CYCNUS, κύκνος. A Swan. See CYGNUS.

CYDAR. Jupiter; that is, Tin. *Rulandus*.

CYDONATUM, κυδνάτιον. The Name of a Preparation of Quinces, with an Addition of Aromatics, describ'd by *Paulus Aegineta*, L. 7. C. 11.

CYDONIA. The Quince-tree.

The Characters are;

It is low, with spreading and contorted Branches; the Calyx resembles that of the Pear-tree; the Flower is rosaceous, and pentapetalous like that of the Pear-tree; the Ovary also resembles that of the same Tree; and the Fruit is much like a Pear, carnos, harsh, umbilicated, containing several glutinous Seeds, within five membranous Cells; and cover'd with a hoary Down. *Boerhaave*, *Index alter*, Part 2. p. 247.

1. *Cydonia*; fructu oblongo, laeviori. T. 632. *Boerb. Ind. A. 2.* 247. *Malus Cydonia*, *Cotonea*, Offic. *Malus Cotonea*, Ger. 1264. Emac. 1452. Rali Hist. 2. 1452. J. B. 1. 27. Chab. 2. *Malus Cotonea vulgaris*, Park. Theat. 1504. *Cydonia fativa*, Jonsf. Dendr. 8. *Mala Cotonea majora*, C. B. Pin. 434. *Mala Cydonea*, Aldrov. Dendr. 538. THE QUINCE-TREE. Dale.

The Quince is the Fruit of a Tree, which scarcely grows

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so big as an Apple-tree, having usually a crooked Body, with many weak Branches, whose Leaves resemble those of the Apple-tree; but they are rounder pointed, and whitish and hoary underneath. The Blossoms are pretty large, of five whitish purple Leaves, each of which are succeeded by a pretty large Fruit, cover'd over with a Down or Wooliness, being but of an unpleasant Taste, and not fit to be eaten raw. There are two Sorts of them; one being in Shape more like an Apple, the other more like a Pear, which is accounted the best. It grows in moist Places, hanging over Ponds and Moats; flowering in May; the Fruit being ripe about *Michaelmas*. The Fruit and Seed are used.

Quinces are cordial, and agreeable to the Stomach; strengthening it, and helping Digestion, and staying Vomiting and Hiccough. They are likewise restraining and binding, and good for all Sorts of Fluxes and Loosenesses. The Seed is balsamic and mollifying, tempering the Acrimony of the Humours, and serviceable against sore Mouths and Throats, and a Thrush; for which a Mucilage made of them is frequently prescribed. The same outwardly us'd is very healing to sore chopt Nipples.

Officinal Preparations of Quinces are the Syrup, the *Electuarium Diacydonium*, and *Rob*.

The History of Plants, ascribed to *Boerhaave*, says thus farther of them, that

The Juice of Quinces, before they are quite mature, is very friendly and strengthening; when mature, it is less astringent, and so it is when well boiled. The Seeds are of a quite contrary Quality, being emollient. Infus'd cold in Rose water, they are of excellent Service in Ophthalmies, and in allaying the Heat of the Tongue and Fauces. An Emulsion of the Seeds with pure Water eases the Pains of Combuitions, if the Tendon be injur'd; whence it appears, that the Seeds are anodyne: They are also of signal Use in stopping of Blood, Ulcers of the Lungs, and the Haemorrhoids.

*Syrupus Cydoniorum*:

SYRUP of QUINCES.

Take six Pints of the clear Juice of Quinces; boil it gently till Half is evaporated, and at times take off the Scum that rises upon it; then put to it three Pints of red astringent Wine, and of fine Sugar four Pounds; which boil into a Syrup, that may be aromatized with Cinamon, one Dram and an half; of Cloves and Ginger, each two Scruples.

This hath *Mesue* for its Author, and hath been retained in all the Dispensatories of the College; tho' the preceding to this gives the Liberty of making it with one Pint of the Juice of Quinces only, and two Pounds of Sugar, and only melting them together, as the other subacid and austere Syrups; and that way the Shops have been of late most accustomed to make it.

*Diacydonium*.

Take of the clean Pulp of Quinces, cut into Slices, and boiled up to Thickness, in fair Water, eight Pounds; of the whitest clarify'd Sugar, boil'd up also to a due Consistence, six Pounds; and boil them together into a thick Substance.

This hath, for a long time, had a Place in most Dispensatories; but it is now altogether made by the Confectioners, by the Name of Marmalade.

*Rob Cydoniorum*:

ROB of QUINCES.

Take of the depurated Juice of Quinces, as much as you please; and, after it is gently boil'd to the Consumption of a third Part, add to it half a Pound of the finest Sugar, and continue a slow Heat, till it becomes of a due Consistence.

The other Species are,

2. *Cydonia*; fructu brevior & rotundior. T. 633. THE APPLE-QUINCE.

3. *Cydonia*; angustifolia; vulgaris. T. 633. THE COMMON QUINCE-TREE, WITH NARROW LEAVES.

4. *Cydonia*; latifolia; Lusitanica. T. 633. THE BROAD-LEAV'D PORTUGAL QUINCE.

*Boerb. Ind. alt. Vol. 2.*

CYDONIA EXOTICA is the COVALAM.

CYEMA, κύημα. A Conception, or Foetus.

CYGNUS REGINÆ. The Name of a Collyrium describ'd by *Actius*, *Tetrab. 2. Serm. 3. Cap. 104.* and mention'd by *Actuarius*, *Metb. Med. L. 6. C. 5.*

CYGNUS.



CYGNUS, Offic. Aldr. Orn. 3. 8. Bell. des Oyse. 152. Charlt. Exer. 103. Gefn. de Avib. 327. Jonf. des Avib. 90. *Cygnus Mansuetus*, Raii Ornith. 355. Ejusd. Synop. A. 136. Mer. Pin. 174. Olor, Schrod. 5. 321. Will. Ornith. 271. THE SWAN.

The Part of a Swan used in Medicine is the Fat, which is esteem'd emollient, attenuating, and lenient; and is therefore said to be good for the Piles, and Indurations of the Uterus. Mix'd with Wine, it removes Freckles of the Skin, if these are anointed with them.

The Skin of a Swan is sometimes directed to be apply'd to Parts affected with a Rheumatism; and to other Parts. It is said to fortify the Nerves and Stomach, to dispel Flatulences, and to assist Digestion, when apply'd to the Stomach.

CYITES. A Name for the *Lapis Aetites*. See AETITES.

CYLICHNE, κυλίχνη. A small Vessel, or Box, for holding Medicines. A Gally-pot, or Pill-box.

CYLLOS, κυλλός, in *Hippocrates*, is one affected with a kind of Luxation, which bends outwards, and is incurvated or hollow'd inwards. Such a Defect in the Tibia is call'd κυλλώσις (*Cyllosis*); and the Person to whom it belongs is, by the *Latins*, call'd *Varus*, and opposed to *Valgus*, βλαχώς, (*Blæffus*) one who has his Legs bent the other Way. See *Hippocrates de Articulis*, with *Galen's* Comment thereon. Κυλλομένη κοιλία, in *Coac.* is the same as *ὄγκυμένη* in *Prorrh.* and signifies a swelling, protuberant, gibbous Belly. Κυλλών, in *Hippocrates de Articulis*, frequently also imports maim'd, mutilated, contracted, weak, and imperfect.

CYMA, κύμα, and, by the Figure *Synæresis*, κύμα, Foetus, and Foetura, are Names for what we call a Sprout, or little Shoot. This, in Botany, signifies the superior small tender Stalk, which Herbs send forth in the Beginning of the Spring; and it is, in a particular Manner, applied to those delicate and tender Shoots produced at the first Budding of Cabbage. Some *Latin* Authors have call'd it *Turio* and *Asparagus*. In a more extensive Sense, the Word *Cyma* signifies the Tops of any Plants whatever, according to *Ray* in his *Hist. Plantar.*

CYMATODES, κυματώδης, from κύμα, a Wave. Undulating. It is apply'd to the Pulse. See PULSUS.

CYMBALARIA. A Name for the *Linaria*; *folio glabro, subrotundo*; *Hederæ folio Clematidis*. See LINARIA.

CYMBALARIS CARTILAGO. A Name for the Cricoid Cartilage.

CYMBIFORME OS. The Name of a Bone in the Heel. See CRUS.

CYMINUM, Cumin. See CUMINUM.

CYNANCHE, κυνάγχη. A Species of Quinsy. See ANGINA.

CYNANCHICA MEDICAMENTA are those Medicines appropriated to that terrible Species of Quinsy, which is accompanied with an Inflammation of the Fauces, an incredible Difficulty of Breathing, and which is call'd *Cynanche*, from the *Greek* Words κύων, a Dog, and ἀγχω, to suffocate; for when Dogs are hang'd, because their Bodies are not sufficiently heavy to produce a strong Compression of the Rope, they generally do not die suddenly, but struggle for a considerable time with Death, with their Eyes turgid, and their Tongues, which are now of a leaden Colour, hanging out of their Mouths, which are open, grinning, and foaming; and because, in this Disorder, a Set of similar Symptoms afflict the Patient, 'tis therefore call'd *Cynanche*. The Remedies, appropriated for its Removal, are such Antiphlogistics as speedily produce their Effects, liberal Venesections, and powerful Evacuations by Stool; together with other refrigerating and relaxing Medicines, both exhibited internally, and applied externally. See ANGINA.

CYNANTHEMIS. A Name for the *Cotula foetida*. *Blancard.*

CYNANTHROPIA, from κύων, a Dog, and ἀνθρωπος, a Man. A kind of melancholy Delirium, in which the Persons affected believe themselves to be changed into Dogs; and, in consequence thereof, endeavour to act like them.

CYNCHNIS, κυγχνίς. A small Vessel, or Box, to hold Medicines, or to exhibit them in.

CYNICUS, κυνικός. Canine. Certain Convulsions are call'd *Cynic Spasms*. See SPASMUS.

CYNIPHES, in *Helmont*, signifies Gnats, or Flies.

CYNNABAR. The same as CINNABAR.

CYNNIA, CYMIA, or CARORA. A Vessel in the Shape of an Urinal. *Rulandus.*

CYNOBOTANE. A Name for the *Cotula foetida*. *Blancard.*

CYNOCEPHALUS, κυνοκέφαλος. A Species of Monkey, with a Head resembling a Dog.

CYNOCOPROS, from κύων, a Dog, and κopro, Dung. The Dung of a Dog. See CANIS.

CYNOGRAMBE. Dog's Mercury. See MERCURIALIS.

CYNOCTONON. The *Aconitum*. *Oribasius.*

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CYNOCYTIS. The Dog-rose. See CYNOSBATOS.

CYNODECTOS, κυνόδεκτος. Bitten by a mad Dog. *Dioscorides*, L. 2. C. 99.

CYNODES, κυνώδης. Canine.

CYNODESMION, κυνόδεσμιον, from κύων, which sometimes imports the inferior Part of the Prepuce; and δέω, to bind. A Ligature, by which the Prepuce is bound upon the Glans. *Gorræus.*

CYNODONTES, from κύων, a Dog, and ὀδὸν, a Tooth. The Canine Teeth.

CYNOGLOSSUM.

The Characters are,

The Calyx consists of one Leaf, which is deeply cut into five Parts: The Flower is monopetalous, Funnel-shaped, and also deeply cut into five Segments. Where it begins to expand, appear five hairy little Heads erect, like cylindrical Columns, and under them are five Stamina, proceeding from the Tube of the Flower. The Fruit consists of four rough, and, for the most part, lappaceous Cells, affix'd to a pyramidal quadrilateral Placenta, and containing a flat Seed. *Boerhaave's Index alter, Part 1.*

*Boerhaave* mentions nine Species of this Plant.

1. *Cynoglossum*; majus vulgare. *C. B. Pin.* 257. *Ger. Emac.* 804. *Park. Theat.* 511. *Hist. Oxon.* 3. 448. *Buxb.* 91. *Tourn. Inst.* 139. *Elem. Bot.* 116. *Mer. Pin.* 32. *Merc. Bot.* 1. 31. *Phyt. Brit.* 33. *Boerb. Ind. A.* 192. *Rupp. Flor. Jen.* 9. *Cynoglossum*, Offic. *Cynoglossum*, *Ger.* 659. *Raii Synop.* 3. 226. *Cynoglossum vulgare*, *J. B.* 3. 598. *Raii Hist.* 1. 489. *Dill. Cat. Gill.* 89. HOUNDS-TONGUE. *Dale.*

The Root of the common Hounds-tongue is thick and long, of a dark-brown Colour on the Outside, and whitish within: The lower Leaves are near a Foot long, and two or three Inches broad, pointed at the Ends, being soft and woolly in handling: The Stalk grows to be two or three Foot high, beset with smaller and narrower Leaves, and having on their Top several Flowers, growing together, of a fullen red Colour, in Shape like Bugloss, but much less, appearing but little above the green Calyces they stand in; each Flower is follow'd by four flat rough Seeds, standing about the Pistillum, appearing, as they are all join'd together, like a Shield or Buckler. The whole Plant has a fetid Smell, like the Urine or Dung of Mice. It grows by Hedges and Road-sides; and flowers in June and July. The Root only is used.

The Root of this Plant is cold, drying, and binding, useful in catarrhus Defluxions upon the Lungs, and to temper the Sharpness of the Blood; and, by consequence, good for all kind of Fluxes and Hæmorrhages, as well as for a Gonorrhœa.

It is likewise reckon'd among the Vulneraries; and good against scrophulous Tumors, both taken inwardly, and applied outwardly as a Cataplasim.

The only officinal Preparation from this Root is the *Pilula de Cynogloss.*

The Bark of its Root is a little bitter, saltish, styptic, and glutinous: It gives a pretty deep-red Colour to the blue Paper. It is likely, that the Sal Ammoniac, which is naturally in the Salt of the Earth, predominates in this Plant, where it is temper'd with a great deal of Phlegm, Earth, and fetid Oil.

The Hounds-tongue, analysed, gives strong Indications of an acrid Salt and Sulphur: Thus the Root of it is proper to stop all sorts of Defluxions, and to correct acrid Humours. It is used in Ptisans and Broths. It has given Name to the *Pilula de Cynogloss.*, which *Faventinus* recommends very much for Catarrhs; but those which are describ'd in *Renodæus's* Dispensatory must be used. *Faventinus* mix'd half a Dram of these Pills with one Dram of Aloes, two Drams of the Juice of Liquorice, and as much Syrup of Violets as was necessary to form them into Pills. The Leaves of this Plant are vulnerary and detesive. *Martyn's Tournesfort.*

PILULÆ DE CYNOGLOSSO: Compound Pill of Hounds-tongue.

Take of the dried Roots of Hounds-tongue, white Henbane-seeds, and Opium, of each half an Ounce; of Mastich, six Drams; of Olibanum, five Drams; of Saffron, Castor, and Storax, of each one Dram and a half: Let the Hounds-tongue-root, the Henbane-seeds, and Castor, be powder'd together; but the Mastich, Saffron, Olibanum, by themselves separately: Let the Opium be cut into thin Slices, and dissolved in Rose-water; afterwards put in the Powders, and make into a Mass of a Consistence fit for Pills, with a sufficient Quantity of Diacodium.

2. *Cynoglossum*; majus; vulgare; flore albo. *C. B. P.* 257. *T.* 139. b. COMMON HOUNDS-TONGUE, WITH A WHITE FLOWER.

3. *Cynoglossum*; floribus ex albo & rubro variegatis. *H. L. Flor.* 2. 62. b.

4. *Cynoglossum*; montanum; maximum. *T.* 139. THE LARGEST MOUNTAIN HOUNDS-TONGUE.

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5. Cyno-



5. Cynoglossa; media; argentea; Apula; campestris; calidarium regionum. *Col.* 1. 172. *Descr.* 171. *lc.*

6. Cynoglossum; sempervirens. *C. B. P.* 257. *Prodr.* 119. *M. H.* 3. 449. EVER-GREEN HOUNDS-TONGUE.

7. Cynoglossum; minus. *C. B. P.* 257. *Buglossum, angustifolium, semine echinato.* *T.* 134. *Lappula rusticorum.* *Lugd.* 1240.

8. Cynoglossum; Creticum; latifolium; foetidum. *C. B. P.* 257. *M. H.* 3. 449.

9. Cynoglossum; Narbonense. *H. Eyf. Æst.* 6. 8. *F.* 6. *T.* 3. *b. H.* *Boerb. Ind. alt. Plant. Vol.* 1.

CYNOLOPHA, κυνόλοφα. *Pollux* calls these certain Asperities of the Vertebrae, in the Beginning of the Spine of the Back.

CYNOLYSSA. The same as Lyssa, λύσσα, that Species of Madness which is caused by the Bite of a mad Dog.

CYNOMORON. A Name for the *Cynocrambe* in *Paulus Aegineta.* See MERCURIALIS.

CYNOMYJA. A Name for the *PSYLLIUM* in *Oribasius.*

CYNORRHODON, from κύων, a Dog, and ῥόδον, a Rose. The Dog-rose. See CYNOSBATUS.

CYNOSBATUS.

*Rosa canina, Cynosbatus, Cynorrhodon, Offic. Rosa sylvestris, canina, Cynorrhodon, Cynosbatus, Mont. Ind.* 51. *Rosa sylvestris, inodora, seu canina, Park. Theat.* 1017. *Raii Hist.* 2. 1470. *Synop.* 3. 454. *Rosa canina inodora, Ger.* 1087. *Emac.* 1270. *Mer. Pin.* 105. *Rosa sylvestris vulgaris, flore odorato, incarnato, C. B. Pin.* 483. *Tourn. Inst.* 638. *Elem. Bot.* 501. *Jonf. Dendr.* 402. *Dill. Cat. Gill.* 90. *Rosa sylvestris vulgaris, flore odorato, Buxb.* 285. *Rosa sylvestris, Merc. Bot.* 1. 65. *Phyt. Brit.* 105. *Rosa sylvestris, variorum colorum, foliis glabris, inodoris, Rupp. Flor. Jen.* 111. *Rosa sylvestris alba cum rubore, folio glabro. J. B.* 2. 43. *Chab.* 108. THE COMMON BRIAR, OR DOGS-ROSE.

The wild Briar, or Rose, that grows on the Hedges, has winged Leaves, like Garden Roses, but smoother and greener. The Flowers are single, of five white, and sometimes pale-red Leaves; and, when they are fallen, there succeed roundish red Seed-vessels, full of Pulp, inclosing white corner'd Seed, cover'd with short stiff Hairs. It grows every-where in the Hedges, and flowers in June; and the Hips are fit to be gather'd about the latter End of September. On the Stalks of this Plant grows the *Bedeguar*, which is a reddish-green spongy hairy Excrescence, made by small *Ichneumon* Flies.

The Flowers of the wild Briar are accounted rather more restraining than the Garden Roses; and, by some, are reckon'd as a Specific for the Excess of the Catamenia. The Pulp of the Hips has a pleasant grateful Acidity, strengthens the Stomach, cools the Heat of Fevers, is pectoral, good for Coughs, and Spitting of Blood, and the Scurvy. The Seed is accounted extraordinary good against the Stone and Gravel; and the same Virtues are attributed to the *BEDEGUAR*, which see.

The only officinal Preparation is the *Conserva Cynosbati.* See CONSERVA. See HYDROPHOBIA. *Ehrenfridus Hagendorinus* wrote a Treatise expressly on the Subject of this Plant, which is intitled *Cynosbatologia, Jenæ, 1679.*

CYNOSORCHIS. A Plant call'd Dogs-stones. See ORCHIS.

CYON, κύων. A Dog. It imports also the inferior Part of the Prepuce, and the Penis.

CYOPHORIA, κυφορία, from κύημα, the Fœtus, and φέρω, to carry. Gestation, spoken of a Woman with Child; or the Time of Gestation.

CYPARISSUS. The same as CYPRESSUS, which see.

CYPERI. See GRAMEN CYPEROIDES.

CYPEROIDEA GRAMINA. See GRAMEN CYPEROIDES.

CYPERUS.

The Characters are,

The Stalk is triangular, and bears, on the Top, a Panicle, consisting either of a Multitude of full, or narrow scaly and compress'd Spikes, in close Order, or of numerous smaller Locustæ. *Boerhaave's Index alt. Part* 2.

The Species are,

1. Cyperus; odoratus; radice longa; five *Cyperus officinarum, C. B. Pin.* 14. *Theat.* 216. *Boerb. Ind. A.* 2. 165. *Tourn. Inst.* 527. *Elem. Bot.* 419. *Cyperus longus, Offic. Ger.* 28. *Emac.* 30. *Raii Hist.* 2. 1299. *Synop.* 3. 425. *Cyperus longus odoratus, Park. Theat.* 146. *Cyperus longus odoratus, Hist. Oxon.* 3. 237. *Cyperus, paniculâ sparsâ speciosâ, J. B.* 2. 501. *Cyperus, Chab.* 194. LONG-ROOTED CYPERUS.

The long Cyperus has a great many narrow grassy Leaves, rough and hard in handling, among which arises a triangular Stalk, about two Foot high; on the Top of which grows a Tuft, or Panicle, consisting of small brown scaly Spikes, with a few short Leaves set on at their Bottom. The Root is long and slender, of a dark-brown Colour on the Outside, and lighter within, of a pleasant Scent, and a little hot and bitter

in Taste. It grows in some Parts of England in the Marshes; but we have it generally brought from Italy. *Miller's Bot. Off.*

2. Cyperus; rotundus; esculentus; angustifolius. *C. B. Pin.* 14. *Theat.* 222. *Hist. Oxon.* 3. 236. *Tourn. Inst.* 527. *Elem. Bot.* 419. *Boerb. Ind. A.* 2. 166. *Trasi, Offic. J. B.* 505. *Tarfi Malinathalle Theophrasti, Chab.* 195. *Cyperus esculentus, Raii Hist.* 2. 1301. *Cyperus rotundus, esculentus, angustifolius, C. B. Pin.* 14. *Theat.* 222. *Hist. Oxon.* 3. 236. *Tourn. Inst.* 527. *Elem. Bot.* 419. *Boerb. Ind. A.* 2. 166. *Cyperus esculentus five Trasi Italorum, Ger. Emac.* 32. *Cyperus dulcis rotundus, Trasi dulce vocatus, Park. Theat.* 146. SWEET CYPERUS, OR RUSH-NUT.

It grows in Italy, and other Parts. The Root is used, and agrees with the other Species in Virtues.

3. Cyperus; rotundus; inodorus; Germanicus. *C. B. P.* 15. *Th.* 215. *Boerb. Ind. alt. Vol.* 2.

Besides the preceding Species of the *Cyperus*, Dale mentions the following:

CYPERUS ROTUNDUS, Offic. *Cyperus rotundus Orientalis major, C. B. Pin.* 13. *Theat.* 208. *Raii Hist.* 2. 1299. *Hist. Oxon.* 3. 206. *Cyperus rotundus Syriacus, Ger. Emac.* 31. No. 3. *Cyperus rotundus, odoratus, Syriacus, Park. Theat.* 145. *Cyperus Syriacus & Creticus rotundior, J. B.* 2. 502. *Chab.* 194. ROUND-ROOTED CYPERUS.

The Roots of the round *Cyperus* are of the Bigness and Shape of a Nutmeg, rough and brown on the Outside, and whitish within, of a pleasant fragrant Sweetness, fasten'd together by slender Strings: In its Leaves, Stalks, and Manner of growing, it pretty much resembles the long *Cyperus*, and is brought from Turkey.

The long and round *Cyperus* are much of a Nature, and have the same Virtues, being heating and drying, expelling Wind, and strengthening the Bowels: They help the Colic, provoke Urine, and the Terms, and prevent the Dropsy: They are cephalic, and good for the Swimming of the Head, and Giddiness; and are sometimes used in absterive Gargarisms for Ulcers in the Mouth and Gums. *Miller's Bot. Off.*

*Geoffroy* add., that the round *Cyperus* is carminative, emmenagogue, stomachic, and diuretic. *Hippocrates* recommends it in Diseases of the Uterus; and *Simon Paulli* in Ulcers of the Bladder, mix'd with the *Schœnanthe*.

CYPHI, κύφι, is a Composition of sixteen Ingredients, which are Honey, Wine, Raisins, Cyperus, Rosin, Myrrh, Aspalathus, Sefeli, Juncus odoratus, Bitumen Judaicum, Thryon, [θεύρα, a sort of Rush, *Xylander* reads βείρα, a Fig-leaf] *Lapathum*, both sorts of Juniper-berries, which they name the great and the small Juniper-berries, Cardamoms, and Calamus. These Simples are not compounded in a careless Manner, but the sacred Writings are read to the Apothecaries, while they are mixing them. There seems to be something extraordinary in the very Number, being the Square of a Square, and the only evenly even Number, which has its Area equal to its Circumference. But these, it must be confess'd, are the least Reasons for its salutary Effects, which are more to be ascrib'd to the aromatic Qualities of the several Ingredients. *Cyphi* emits a sweet and wholesome Fragrance, by which the Air, being changed, produces, by means of Respiration, due Motions in the Body, and receives itself a mild and pleasing Temperature; by which every thing, which sits uneasy upon the Thoughts, is gently removed; and those daily Cares, which are as so many Fetters of the Mind, are, without the Help of Ebriety, relax'd and discharged; and the Imagination, and that Faculty within us, which is the Seat of Dreams, are purify'd, and brighten'd up like a Glass; and all this is done as effectually as by the Sound of a Harp, which the *Pythagoreans* used in order to compose themselves to Sleep; and by whose lulling Melody the irrational Part of the Soul, the Seat of the Passions, was charm'd and reduced to due Moderation and Obedience: For Odours oftentimes recal the fainting Senses; and, on the contrary, as often blunt, and compose them to Rest; the Exhalations, by their Smoothness, diffusing themselves over the Body; as some Physicians say, that Sleep is procured by Vapours, proceeding from the Aliment, and smoothly creeping about the Viscera, where they excite a kind of Titillation.

The Egyptians use the *Cyphi* in a medicinal Potion, on account of its clearing the internal Parts, and relaxing the Belly.

It is also to be consider'd in this Composition of the *Cyphi*, that the Rosin is the Work of the Sun, and that the Myrrh is a Tear which distils from Plants by the Light of the Moon. Of the Ingredients some delight in the Night-season, being nourish'd with cold Spirits, Shades, Dews, and Humidities: For the Light of the Day is single and uniform, and the Sun, as *Pindar* says, "is seen thro' the void Æther;" but the nocturnal Air is mix'd and temper'd with various Lights and Qualities, which, from a general Conflux from all the Stars, unite like Seeds in one. It is not without Reason, therefore, that the former, as being of a simple Nature, and procreated by the Sun, are burnt in Sacrifice in the Day-time; but the others, which



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are a Mixture endued with all kinds of Qualities, are offer'd in the Beginning of the Night. *Plutarch de Iside & Osiride.*

*Suidas*, under the Article *κύπρις*, says, that this was made by *Manethos*, the Egyptian; but confesses, that he does not know the Composition. Under the Article *Μαναιθω*, he informs us, that he was an Egyptian Priest, who wrote upon the Composition of the *Cypri*.

The Composition call'd *Cypri* was much used in the Egyptian Sacrifices; and hence the Troches, call'd *Trochisci Cypheos*, acquired their Name.

## TROCHISCI CYPHEOS.

Take of the Pulp of fat Raisins, well cleansed from the Husks and Stones, and of *Cyprus Turpentine*, of each three Ounces; of Myrrh and *Schoenanth*, of each one Ounce and an half; of Cinnamon, half an Ounce; of *Calamus Aromaticus*, three Drams; of round Cypress-root, Spikenard, Cassia-wood, Juniper-berries, fat Bdellium, and Wood of Aloes, of each two Ounces and a half; of Saffron, one Dram; a small Quantity of Canary; and of the best despumated Honey, a sufficient Quantity. Let the Myrrh and Bdellium be reduced in a Mortar, with Wine enough, to the Consistence of a thin Honey; then stir in the Turpentine, the Pulp of the Raisins, and the Powders; and let all together be well simmer'd, with Honey well despumated, into a due Consistence to be formed into Troches.

This is but a troublesome Composition; but, as it is made a standing Ingredient in the Mithridate, its Prescription is still necessarily retained here, as it is likewise in the *Augustan*, and all other officinal Dispensatories of Note. It is originally ascribed to *Damocritus*, who, it seems, attempted to reform the Mithridate, and contrived these Ingredients into this Form on purpose for that. It is taken notice of by *Galen*, de *Antidotis*, and recommended, in some Cases, by itself; but modern Practice knows no other Use for it, than what it was originally design'd for.

**CYPHOMA**, and **CYPHOSIS**; *κύρμα*, or *κύφωσις*, from *κύρνω*, to bend. An Incurvature of the Spine of the Back, when the Vertebrae incline preternaturally outwards.

**CYPRESSUS**. The Cypress.

The Characters are,

The Leaves are squamous and flat: The Male Flowers, which are squamous, grow at remote Distances from the Fruit, on the same Tree: The Fruit is of a spherical Form, and is composed of many woody Tubercles, in which are contain'd hard angular Seeds. *Miller's Dictionary.*

*Boerhaave* mentions three Species of this Plant; which are,

1. *Cypressus*; *metà in fastigium convoluta*; quæ *Fœmina* Plinii. T. 587. THE COMMON CYPRESS-TREE.

This grows to be a large, tall, high Tree, covered all over, almost from the Ground, with slender Branches, growing close together, making the Tree have a pyramidal Shape, with small, short, sharp, and, as it were, scaly Leaves, which cover over all the young Twigs. The Flowers are small and staminate, succeeded by Cones or Nuts, as they are call'd, which are round, near as big as a Walnut; when ripe, opening with several Clefts, in which lie brown, flattish corner'd Seeds. It is planted in Gardens for its pleasant Verdure, being a Perennial or Evergreen, holding its Leaves all Winter, and shooting out fresh in the Spring. We have two Species growing in our Gardens, whereof the *Fœmina*, or that whose Branches grow closer together, is the most common, having somewhat longer Nuts than the *Mas*, whose Branches are more expanded, and Cones or Nuts rounder.

The Cones or Nuts are principally used; the Leaves but seldom: They are accounted very drying and binding, good to stop Fluxes of all Kinds, a Spitting of Blood, Diarrhoea, Dysentery, the immoderate Flux of the Menfes, and involuntary Discharge of Urine: They prevent the Bleeding of the Gums, and fasten loose Teeth: Outwardly they are used in styptic restraining Fomentations and Cataplasms.

2. *Cypressus*; *ramos extra se spargens*; quæ *Mas* Plinii. T. 587. THE MALE SPREADING CYPRESS.

3. *Cypressus*; *Virginiana*; *foliis Acaciæ deciduis*. H. L. H. A. 1. 113. THE VIRGINIAN CYPRESS-TREE, WITH LEAVES LIKE THE ACACIA, WHICH FALL OFF IN WINTER. *Boerb. Ind. alt. Plant. Vol. 2.*

**CYPRINUM OLEUM**, *κύπρινον έλαιον*.

Take of Oil of unripe Olives, (*ελαιον άμφοκίνυ*) wash'd, one Ceramium (a Measure containing about ten Gallons two Pints); Rain-water, one Ceramium and a half; of which mix one Half with the Oil, and reserve the other to be mixed with Spices. Then take of Aspalathos, five Pounds and a half; of Calamus, six Pounds and a half; of Myrrh, one Pound; Cardamoms, three Pounds nine

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Ounces; Elecampane, nine Pounds five Ounces. Bruise the Bitumen Judaicum, and macerate it in Water; then set it over the Fire with the Oil till they boil. Dissolve the Myrrh in odoriferous Wine, bruise the Calamus, and, mixing them together, take out the Aspalathos, and put in this Mixture of the Calamus into the Oil; and, when they have just boiled together, remove the Vessel from the Fire, and strain it off. Then, having bruised the Cardamoms, and mixed them with the rest of the Water, pour thereto what was boiled, and continually stir it with a Spatula till it be quite cold. Afterwards strain off the Oil, and to forty-eight (I read *μύ* instead of *κί*, with *Cornarius*) Pounds of Oil put forty-six Pounds eight Ounces of Flowers of Cypress; and, having let them alone to macerate, pass them thro' a Wicker Basket. If you desire more of it, you may put in the same Quantity of fresh Flowers, and strain it off in like manner; for you may make a second or third Maceration, if you please, the Preparation being the stronger for it. In chusing it, you ought to regard its Goodness, and the striking Fragrancy of its Smell. Some mix Cinnamon with it.

*Cyprinum* is of a heating and mollifying Quality, and opens the Mouths of the Vessels, on which account it is proper in Affections of the Uterus and Nerves, and also for Pleurifies and Fractures, either by itself, or mixed with Cerate. It is also an Ingredient in Malagmas for the Opisthotonos, Quinsy, and Inflammations in the Groins; and also enters the Composition of Acopa. *Dioscorides, Lib. 1. Cap. 65.*

**CYPRUS**. See **PHYLLAREA**; *folio Liguſtri*.

**CYPSELE**, or **CYPSELIS**; *κυψέλη*, or *κυψελίς*, The Wax of the Ears.

**CYPTARION**. The Name of an Antidote in *Myrepsus*, *Sec. 5. Cap. 9.*

**CYRÆNIA**. In *Rulandus* the Fæces of Saffron infus'd in Oil.

**CYRBASIA**. Properly the *Tiara*, a Sort of Cap worn by the Persian Monarchs. *Hippocrates* makes use of this Word, in his Treatise of the Diseases of Women, in describing a Sort of Covering which he directs for the Breast.

**CYREBIA**, *κυρέβια*. The Husks of Barley, or of other Corn, which fall off whilst they are torrefying, or soaked in Water.

**CYRENAICUS SUCCUS**. The same as **LASERPITIUM**.

**CYRSEON**. The Podex, or Anus.

**CYRTOIDES**, *κυρτωειδης*. Gibbous.

**CYRTOMA**, *κύρτωμα*. Any preternatural Tumor, Pro-tuberance, or Gibbosity.

**CYSSAROS**, *κύσσαρος*. The Podex, or Anus.

**CYSSITES**. A Name for the *Lapis Aëtites*.

**CYSTEOLITHOS**, from *κύστις*, the Bladder, and *λίθος*, a Stone. The Stone in the Bladder.

**CYSTHEPATICI DUCTUS**. The Cysthepatic Ducts, that is, Ducts which convey the Bile from the Liver to the Gall-bladder.

**CYSTICAPNOS**.

The Characters are,

It hath an annual fibrous Root; the Leaves, Branches, and Flowers, have the Appearance of climbing Fumitory; the Fruit is an oval Bladder, pierced thro' by an Axis, to which are fasten'd round Seeds on every Side, inclosed again with one common Vellele, which is expanded about the Axis.

*Boerhaave* mentions but one Species of this Plant, which is, *Cysticapnos*; *Africana*; *scandens*. *Fumaria, Africana, vesicaria, scandens*. Par. Bat. App. 7. *Fumaria, alba, vesicaria, capreolis donata, sub exitura autumnii florens, Aethiopia*, Plukn. 400. a. **AFRICAN CLIMBING BLADDER FUMITORY**. *Boerb. Ind. alt. Plant. Vol. 1.*

**CYSTINX**, *κύστιγξ*. A small Bladder.

**CYSTIS**, *κύστις*. The Bladder of Urine; but *Cystis Fellea* is the Gall-bladder. Hence *Cystis* is applied to any Receptacle of morbid Humours resembling a Bladder.

**CYSTOTOMIA**, from *κύστις*, the Bladder, and *τομή*, to cut. The Operation of Lithotomy.

**CYTHION**. The Name of a Collyrium mentioned by *Celsus*.

**CYTINUS**. The Flower of the Pomegranate.

**CYTIſO-GENISTA**.

The Characters, according to *Miller*, are,

It hath papilionaceous (or Butter-fly) Flowers, which are succeeded by compressed Pods, in which are contain'd many Kidney-shap'd Seeds: The Branches are flexible, and have sometimes single Leaves, and at other times three Leaves join'd together.

*Boerhaave* mentions but one Species of this Plant, which is, *Cytiso-genilla scoparia*; *vulgaris*; *flore lutea*. *Tourn. Inst. 649. Boerb. Ind. A. 2. 27. Genista*, Offic. Ger. 1130. Emac. 1311. Chab. 83. Mer. Pin. 44. *Genista vulgaris*, Merc.



Merc. Bot. 1. 37. Phyt. Brit. 45. *Genista vulgaris* & *scoparia*, Park. Theat. 228. *Genista angulosa* & *scoparia*, C. B. Pin. 395. *Genista non spinosa angulosa* & *scoparia*, Jonf. Dendr. 372. *Genista angulosa trifolia*, J. B. 1. 388. Raii Hist. 2. 1723. Synop. 3. 474. *Cytisus scoparius vulgaris*, Elem. Bot. 508. COMMON BROOM. Dale.

This has a large, thick, woody Root, running deep in the Earth, whence it is with Difficulty extirpated; from which spring a great Number of Stalks, growing pretty close together, which are very tough, somewhat wadded and angular, growing two Foot or more high. It bears at every Joint three small oval Leaves, growing on a common Foot-stalk, which quickly fall away, appearing bare of Leaves for a great Part of the Year. The Flowers grow on the Branches from the Middle upwards, being large and papilionaceous, of a bright-yellow Colour, and are succeeded by flat very hairy Pods, containing small, brown, Kidney-like Seed. It grows in Fields and Commons, and flowers in April and May. The Flowers and Stalks are us'd.

Broom is an aperitive and hepatic Shrub, opening Obstructions of the Liver and Spleen, provokes Urine, and is accounted very good for the Dropsy, being infused in the common Drink. The Ashes likewise, infused in Ale or Wine, are used against the same Distemper, causing great Discharges of Water by Urine. The Flowers, before they are grown to any Bigness, are pickled with Salt and Vinegar, and are eaten for Sauce, like Capers, and are esteemed by many as wholesome for the Stomach, and good against Diseases of the Spleen and Liver.

*Cordus* has observed, that this Plant stinks like the Elder: Its Smell seems stronger to me, and to approach to that of the fetid Oils: Its Leaves are bitter, and give no Redness to blue Paper; whence we may conjecture, that they contain a Salt resembling the natural Salt in the Earth, mixed with a great deal of fetid Oil: Thus this Plant is aperitive and diuretic. *Pena* and *Lobel* affirm, that, in *Guien* and *Auvergne*, the People eat Broom-flowers in Salad, without any Provocation to vomit. *Simon Paulli* has observed, however, that two Drams of these Flowers, infused in Hydromel, purged very well. If it be so, it is probable, that the Vinegar stops their purgative Quality; for every body knows, that Acids weaken Purgatives. These Authors also have observed the Seeds of Broom to be very little emetic. *Tragus* recommends the distill'd Water of Broom-flowers for the Stone: He says, that a Scruple of the Seed, powder'd, is sudorific; and that a Glass of the Juice of the Branches, macerated in Water, gives great Relief in the Sciatica and Quinsy. *Dodonæus* prescribed the Infusion of the young Shoots to bring off the Serosities of hydropical and cachectic Persons by Urine: He also gave them to drink the Ashes of the same Plant, infused in White-wine; but he gives notice, that they are very acrid. They may be corrected with Cream of Tartar. *Julius Cæsar Claudianus* mixed them with the Salt of Wormwood, and has published this Secret as an excellent Remedy for the Dropsy. The Extract of the Leaves has the same Virtues. The Conserve and Extract of the Flowers are good for the Diseases of the Stomach. They are used in the balsamic Pills, which are taken before Meals. These Pills are strengthening, and keep the Belly open: They are made after the following Manner:

Mix the Extract of eight Ounces of Rhubarb, that of the like Quantity of Aloes, four Ounces of Mastich, six Ounces of Myrrh, two Ounces of Saffron, one Ounce of the Extract of Broom-flowers, and as much Balsam of Peru; make them into Pills, and let a Dram be the Dose. *Martyn's Tournesort*.

It is remarkable, that Sheep are preserved from the Rot, by browsing upon young Broom.

#### CYTISUS.

The Characters, according to *Miller*, are,

It hath papilionaceous (or Pea-bloom) Flowers, which are succeeded by compressed Pods, in which are contain'd several Kidney-shap'd Seeds. To which may be added, the Leaves are, for the most part, roundish, and somewhat like those of the Nettle-tree.

*Boerhaave* mentions sixteen Species of this Plant.

1. *Cytisus Alpinus*; latifolius; flore racemoso, pendulo. Elem. Bot. 508. *Tourn. Inst.* 647. *Boerb. Ind. A.* 2. 26. *Laburnum*, Offic. Chab. 78. *Laburnum trifolium Anagyridi simili*, J. B. 1. 361. *Anagyris*, Ger. 1239. Emac. 1427. *Anagyris non fœtida sive Laburnum majus*, Parkins. Theat.

245. *Anagyris non fœtida major vel Alpina*, C. B. Pin. 391. *Anagyris non fœtens major vel Alpina*, Jonf. Dend. 364. BEAN-TREFOIL-TREE. Dale.

The Leaves are refrigerating, and discuss Tumors; and the Decoction thereof provokes Urine.

2. *Cytisus Alpinus*; latifolius; flore racemoso, pendulo; foliis variegatis. T. 648. *Anagyris, non fœtida major, Alpina, foliis ex albo & viridi eleganter variegatis*. Plukn. Alm. Bot.

3. *Cytisus Alpinus*; angustifolius; flore racemoso, pendulo, longiori. T. 648. *Anagyris, non fœtens, minor*. C. B. Pin. 391. *Egelo. Dod. p.* 785. *Anagyris angustifolia*. H. Eyft. o. 1. F. 7. Fig. 1. THE NARROW-LEAV'D LABURNUM, OR BEAN TREFOIL, WITH LONG PENDULOUS FLOWERS.

4. *Cytisus Alpinus*; flore racemoso, pendulo, breviori. T. 648. *Anagyris, non fœtida, latifolia, floribus densius congestis in breviorum ramum*. Schol. Bot. BROAD-LEAV'D LABURNUM, OR BEAN-TREFOIL, WITH VERY SHORT PENDULOUS FLOWERS.

5. *Cytisus*; glabris foliis, subrotundis; pediculis brevissimis. C. B. P. 390. *Trifolium arborescens*. H. Eyft. Vern. o. Arb. & Fr. F. 10. Fig. 2. H. R. D. ROUND-LEAV'D SMOOTH BASE TREE-TREFOIL, WITH SHORT FOOT-STALKS.

6. *Cytisus*; glaber; nigricans. C. B. P. 390. THE BLACK BASE TREE-TREFOIL.

7. *Cytisus*; glaber; viridis. C. B. P. 390. SMOOTH GREEN BASE TREE-TREFOIL.

8. *Cytisus*; secundus Clusii. H. 94. *Pseudo-Cytisus alter*. Dod. p. 570. H. R. D.

9. *Cytisus*; minoribus foliis; ramulis tenellis, villosis. C. B. P. 390.

10. *Cytisus*; supinus; foliis infra & siliquis molli lanugine pubescentibus. C. B. P. 390.

11. *Cytisus*; Africanus; argenteus; flore atro purpureo. Oldenl. T. 648. H. R. D. SILVER AFRICAN BASE TREE-TREFOIL, WITH A DARK-PURPLE FLOWER.

12. *Cytisus*; hirsutus; flore luteo purpurascens. C. B. P. 390. HAIRY BASE TREE-TREFOIL, WITH A PURPLISH-YELLOW FLOWER.

13. *Cytisus spinosus*. Herm. Cat. Hort. Lugd. Bat. 218. *Tourn. Inst.* 648. Elem. Bot. 508. *Boerb. Ind. A.* 2. 27. *Asphalathus altera*, Offic. *Asphalathus secunda trifolia, quæ Acacia secunda Matthioli trifolia*, J. B. 1. 375. *Asphalathus secunda trifolia, Acacia secunda quorundam*. C. B. Pin. 392. Jonf. Dendr. 366. *Acacia altera trifolia*, Ger. 1149. Emac. 1330. *Acacia Dioscoridis*, Ger. 1149. *Acacia secunda seu altera Dioscoridis*, Park. Theat. 1544. *Cytisus spinosus Acacia dictus*, Raii Hist. 2. 1723. *Cytisus-Spartium, aculeatum, Acacia trifolia dictum*, Plukn. Almag. 129. TREFOIL ACACIA.

The Juice of this *Cytisus* is astringent, and a good Medicine for the Eyes. *Dioscorides*.

14. *Cytisus*; humilis; argenteus; angustifolius. T. 648. H. R. D. SILVERY DWARF BASE TREE-TREFOIL, WITH NARROW LEAVES.

15. *Cytisus*; Monspeulanus; *Medicæ folio*; siliquis dense congestis & villosis. T. 648. BASE TREE-TREFOIL OF MONTPELIER, WITH MEDIC-LEAVES, AND HAIRY PODS GROWING IN BUNCHES.

16. *Cytisus*; argenteus; linifolius; insularum Stœchadum. T. 648. SILVERY FLAX-LEAV'D BASE TREE-TREFOIL OF THE STECHADES ISLANDS. *Boerb. Index alt. Plant. Vol.* 2.

Besides the foregoing Species of the *Cytisus*, Dale mentions the following; which is,

PSEUDO-CYTISUS, Offic. *Pseudo-cytisus hirsutus*, Ger. 1126. Emac. 1308. *Cytisus hirsutus*, J. B. 1. 372. Chab. 79. *Tourn. Inst.* 647. Elem. Bot. 508. *Cytisus Hispanicus arboreus*, Park. Theat. 1475. *Cytisus foliis subrufa lanugine hirsutis*, C. B. Pin. 390. Raii Hist. 1. 971. Jonf. Dendr. 361. Hort. Cath. Supp. A. 25. HAIRY SHRUB-TREFOIL.

The Leaves are used in the same Intentions as those of the other Species.

CYZICENUS, Κυζικηνός. An Epithet of a Plaster describ'd by Galen, de Comp. M. p. G. and recommended for Chironian Ulcers, and Wounds of the nervous Parts.



**D**, in the chymical Alphabet, imports Vitriol.  
 Δ. The Figure of the Letter *Delta*, the fourth in the *Greek Alphabet*, was used by the Antients, as *Galen* says, *Com. 3. in 3. Epid. Tit. 71.* as a Symbol to express a Quartan Fever.

**DABESTIC**. A Tortoise. *Johnson*.

**DABURI**. *Clusii*. A Name for the *ACHIORI*, which see.

**DACETON**, δακτιλόν, from δάκνω, to bite, is an Epithet of such Animals as hurt by biting.

**DACHEL**. A Name in *Boerhaave's Index alter*, for the *PALMA MAJOR*.

**DACNERON**, δακνηρόν, from δάκνω, to bite, biting, is an Epithet of a Collyrium in *Trallian*, call'd also *Oxydorcia* and *Cynopticon*, much recommended by him for clearing the Sight, helping weak Eyes, and discussing a beginning Cataract. It consists of thirty Drams of burnt Copper, sixteen Drams of Pepper, eight Drams of Cadmia, four Drams of Myrrh, the like Quantity of Saffron, twenty-four Drams of Gum Arabic, and five Drams of Opium; use them in Water. *Trallian, Lib. 2. Cap. 5.*

**DACRYDIUM**. The same as *DIAGRYDIUM*, which see.

**DACRYODES HELCOS**, δακρυώδες ἑλκος, from δάκρυ, or δάκρυον, a Tear, is used by *Hippocrates, Lib. de Fract.* to signify an Ulcer running with a thin and undigested Sanies.

**DACRYON**, δάκρυον, a Tear, is an excrementitious, ferous, or lymphatic Liquor, distilling from the *Glandulæ lacrymales*. Tears are distinguish'd into natural or voluntary, and preternatural or involuntary: The first flow from the Eye, on occasion of some extraordinary Passion of the Mind, as Grief, sudden Joy, and the like. The preternatural, or involuntary, are call'd by *Hippocrates δάκρυα ἀκρίσια, Lib. 1. Epid.* where he says, that, in burning Fevers, they prognosticate an Hæmorrhage from the Nose. In *Lib. 4. Epid.* he expresses the same by ἀκρίσις παρρηρόν, "flowing involuntarily." In *Progn.* he uses the Phrase ἀπαραίρητος δακρυόνης ὀφθαλμοῦ, "Eyes weeping undesignedly;" to which, *Aph. 52. Lib. 4.* are oppos'd κατὰ πρᾶξιν δακρυόνης, "weeping spontaneously." And, *Lib. 6. Epid. Sect. 1. Aph. 16.* we are told, "that, in acute Diseases, when the Case is dangerous, voluntary Tears are a good Sign, but involuntary, the contrary." *Galen, de Cur. Rat. ad Glauc.* reckons involuntary Tears among the Signs of an Hæmorrhage.

**DACRYOPOEOS**, δακρυοποιός, from δάκρυ, a Tear, and ποίω, to make, or cause, is an Epithet of some acrimonious Substances, which excite Tears; as the Onion, Sea-radish, and the like.

**DACTILETUS**. The *Hermodactyl*. *Rulandus*.

**DACTYIDEUS**, according to *Johnson*, is the *Lapis Lycis*. See *BELEMNITES*.

**DACTYLETHRAI**, **DACTYLITHRAI**, δακτυλήθραι, δακτυλίθραι, from δάκτυλος, a Finger, from its Figure, is a sort of topical Medicine intruded into the Stomach to provoke Vomiting; and is describ'd by *Oribasius, Collect. Med. Lib. 8. Cap. 6.* "I know some, he says, who anointed their Fingers "with the Juice of Scammony, and, by that means, provoked the Stomach to cast up its Contents; but, if this had "no Effect, they took eight or ten Feathers out of the Tail "of a Goose, and, rubbing them with Oleum Cyprinum, or "Irinum, intruded them." After this follows what relates immediately to this Article: "There is a Method also of "sewing *Dactylethrai* of *Carthaginian*, or some other Kind, "of very soft Leather, ten or twelve Digits in Length, in "the Shape of a Finger. They filled this with Wool, to the "Length of six Digits, and left the rest empty, to be adapted "to the Finger; then they rub'd it with one of the before- "mentioned Oils, and so introduced it into the Stomach."

**DACTYLIOS**, δακτύλιος, in *Hippoc. περὶ γυναικ. φύσ.* is expounded by κύκλος, περισσός, a Tioche.

**DACTYLODOCHME**, δακτυλοδοχμή. See *DOCHME*.

**DACTYLOS**, δάκτυλος. The Fruit of the Palm-tree, call'd also by the *Greeks φοινικοβάλαρος*, and εοίνιξ, as *Galen, Lib. 2. de Alim. Fac.* assures us; for which Reason, as *Foefius* observes, we very rarely meet with δακτύλος in *Hippocrates*, but often with φοίνικας. In the Passage (*Lib. 1. περὶ γυναικ.*) τοῖσι δακτύλοις ἢ ὀφθαλμοῖς θαλασσίαις μᾶλλον ἢ κρείσσιν ἡσθῆναι, "Let her Food be *Dactyli*, and such as the Sea affords, rather "than Flesh-meats," the Word δακτύλοις seems to import something belonging to the Sea, rather than the Fruit of the Palm-tree, because it respects a drying Regimen of Diet: For the *Dactylus* is a Sort of Shell-fish, which has the Name

also of *Unguis*, from its Resemblance to a Man's Nail; and is usually eaten, *Pliny, Nat. Hist. Lib. 9. Cap. 61, & 33.* For the same Reason it was call'd by the *Greeks ὄνυξ (Onyx)*. See *BLATTA BYZANTIA*. But since these Fish abound with a bad and viscous Juice, according to *Athenæus*, and are of a hard Flesh, *Foefius* suspects the Place to be corrupted, and reads with *Cordæus, τεισι δακτύλοις*, connecting it to the foregoing Sentence; other Interpreters read τοῖσι δ' ἄλλοις.

Δάκτυλος is also the shortest Measure among the *Greeks*, being the fourth Part of a Palm, and the sixteenth Part of a Foot, the same as *Digitus* among the *Latins*.

**DACTYLOTHECE**, δακτυλοθήκη, from δάκτυλος, a Finger, and θήκη, a Case, is a Name given, by *Paré*, to a surgical Instrument for raising a Finger or Thumb, when pendulous from some Hurt received.

**DACTYLUS**, in *Boerhaave, Index alter*, is a Name for the *Palma Major*.

**DACTYLUS IDÆUS**. See *BELEMNITES*.

**DÆDALUS**. A Name for Mercury, or Quicksilver, in some chymical Authors.

**DÆDION**, δαῖδιον, is a Diminutive of *DAIS*, a Torch, which see.

**DÆMONIS**. Ordure, Asphaltus. *Castellus*.

**DAIB**, **DEHEB**, **DEHEBEB**, **DEAB**. Gold. *Rulandus*.

**DAIS**, **DAS**, δαῖς, δᾶς, in *Hippocrates*, is the *Tæda*, a sort of Pine-tree, and also the Substance of that Tree. In *Lib. 1. περὶ γυναικείων*, he prescribes δαῖδα πιστάτην, "very "fat *Tæda*," for the Expulsion of the Fœtus; and, in the same Book, in a Suppression of the Menfes, he orders drinking of *Crethimon* ἐν οἴνῳ τῷ ἀπὸ δαῖδος, "in Wine made of the "Tæda," or Wine in which the Tæda is boil'd. And again, for a Retention of the Lochia, he prescribes a Potion, prepared of the Tæda, to be drank every Morning fasting, till the Disorder be removed. In *Lib. περὶ ἀφῶρων*, he directs δαῖδα πιστάτην, very pinguious Tæda, to be cut in thin Slices, and boil'd in the sweetest white Passum, [γλυκύ, Wine made of dry'd Grapes] and so drank; and, in several other Places of the same Book, he orders Shavings of the Tæda, macerated in white Wine, or Water, and drank.

*Dædion*, δαῖδιον, is an oblong, round, and smoothed Tæda, cut in the Form of a Pessary, and introduced into the Uterus, in order to open its Orifice, when closed; and commonly prescrib'd with a leaden Cannula, in many Places of *Hippocrates, Lib. 1. περὶ γυναικ.*

*Dioscorides, Lib. 1. Cap. 86.* speaking of the Pine, and the Pitch-tree, says, that a Tæda, [δαῖδιον] of them, cut into thin Slices, cures the Tooth-ach.

The *Dais*, or *Tæda*, is the Mountain Pine, wholly converted into a pinguious Substance. Hence, says *J. Bauhine*, *Pliny* is mistaken in making the Tæda a particular Kind of Tree, and the sixth of the coniferous Kinds. *Pliny* is also censured, on the same Account, by *Matthiæus, Bellonius, C. Hoffman, Bodæus a Stapel*, and others. *Ray* is of Opinion with *Dalechampsius, Clusius*, and *Parkinson*, that the Word *Tæda* is homonymous, and sometimes signifies the fat and resinous Wood [τὴν δᾶδα] of the Pine, which is burnt instead of a Torch or Candle; and sometimes a particular Kind of Tree, unknown to *Theophrastus*.

From the lower Parts of the Mountain Pine, which are next to the Root, they cut those pinguious Pieces of Wood, which serve to kindle a Fire, and to give Light, and are of great Use in many Countries of *Germany*; for the Humour, descending to the Root, causes a Suffocation; by which means the Tree is converted into a Tæda. Sometimes the Pitch-tree, and the Larch-tree, are converted into a Tæda, but very rarely; for it is a Disease peculiar to the Mountain Pine. From this Use of the Pieces of the Tæda in giving Light, the Word *Tæda* came to be used for any sort of Torch, and especially a nuptial one. *Raii Hist. Plant.*

Δαῖς, or δᾶς, properly signifies a Taper or Torch, from δαῖω, to kindle; whence comes the *Latin Tæda*, as from δάσκειν, *tescum, dir, tina*. All the ancient Copies write Tæda, not Teda; so they properly call'd a Torch made of thin Splinters of Wood, bound together, and daubed over with Pitch. But, for the most part, the δᾶς, or Tæda, were made of the pinguious Woods of the Pine and Pitch-tree, as being very subject to kindle from their native Pitch; but they were most frequently made of the Pitch-tree, as being the most plentifully furnished with that Substance. Hence τειχόν, the Pitch-tree, came to signify the same as δᾶς, a Torch, as ap-



pears from *Pollux*, *Hesychius*, and *Aristophanes*. The *Greeks* then, and especially the Poets, frequently used *πέυκη* for *δῆς*. But we never find, on the contrary, that they made use of *δῆς* to signify *πέυκη*, which would be just as if they should use *Navis* to signify *Pinus*; though *Pinus* is frequently put by the Poets for *Navis*, which is made of the Substance of the Pine. The *Latins*, however, seem to have taken the *δῆς*, and the *λαμπάς*, for the *Picea*, or Pitch-tree; because the *Picea* was most *ἑνδαύς*, or had the Qualifications of a *δῆς* to an extraordinary Degree. *Pliny* every-where, by the Word *Tæda*, means a Tree. *Vitruvius*, *Lib. 7. Cap. 10.* does the same; and, in the Glossaries, *Tæda* is the *δαῖς, πέυκη, ἢ λαμπάς*. And hence *Juvenal*, in the Hemistich—*Si sit latissima Tæda*, uses it as others do *Pinus*, or *Picea*, to signify *Navis*, a Ship: Because, therefore, the *Greeks* confound *δῆς*; and *πέυκη*, in making them both to signify a Torch, the *Latins* have confounded *Tæda* and *Picea*, taking them both for a Tree; which, however, is absurd: And hence *Pliny* renders τὴν δῆδα, and τὸ ἑνδαύον, of *Theophrastus*, as spoken of the Tree *Tæda*, which is extremely absurd. He errs also in making the *Tæda* a sixth Kind of coniferous Tree distinct from the Pitch-tree, and accommodated for Illuminations in sacred Solemnities. A *Tæda* is, indeed, a Torch proper enough on such Occasions; but if there were any Tree called *Tæda*, from whence the *Tædæ* or *Torches* were taken, it could be no other than the *Picea*: Besides, the *Tædæ* were not taken from a particular Tree call'd the *Tæda*, but from the *Picea*, the *Pinus*, and, *ex omnibus δαυφόροις*, “from all tediferous Trees.” *Salmasii Plin. Exer-citationes*.

**DAITIDES**, δαῖτιδες, is expounded by *Galen*, in his *Exe-gesis*, μεγάλαι λαμπάδες, “great Torches;” but is made by Metaphor, he says, to signify Heads of Garlick, because they consist of many Cloves, as Links and Torches are composed of coarse Flax and Paper, bound up, and compacted together, παρὰ τὸ συνδεδεῖσθαι. But *Erotian* reads δέτιδα, and expounds it τὴν λαμπάδα, “a Torch,” παρὰ τὸ δεσμεῖσθαι, from binding. But I rather think, says *Foësius*, those to be in the right, who read *Galen* δαῖτιδα, μικρὰν λαμπάδα, “*Daitis*, a small Torch;” both because *Daitis* is a Diminutive, and as it comes nearer to the Reading of *Erotian*. Δαῖδες, in *Hesychius*, are λαμπάδες, λυχνόι, “burning Torches,” from δαῖω, to kindle. δέται, from δέω, to bind, signify Torches, Fetters, Handfuls; δέται are also δεσμοὶ δέδων, τῆς λαμπάδων, “Bundles of Torches,” because they are bound together. *Foësius*.

**DALECHAMPIA**. A Name given by Father *Plumier* to a Plant found in *Martinico*, which he named thus in Honour of *J. Dalechamps*, a curious Botanist. It is call'd *Dalechampia*, scandens, *Lupuli foliis*, *Fruetu tricoeco glabro*, *Calyce hirsuta*. Climbing *Dalechampia*, with Leaves like Hops, a three-seeded Fruit, and a prickly Cup. *Miller's Dictionary*, Vol. 2.

**DAMA**, Offic. Bellon. Obs. ed. Clus. 57. *Dama vulgaris*, Mer. Pin. 166. Aldrov. de Quad. Biful. 741. Jonf. de Quad. 55. *Dama vulgaris*, five *Recentiorum*, Gefn. de Quad. 307. *Cervus Platyceros*, vel *Platyceros simpliciter dictus Plinio*; *Dama vulgaris*, Raii Synop. A. 85. *Mas* THE BUCK, *femina* THE DOE, *hinnulus* THE FAWN dicta. THE FALLOW DEER.

This Animal is too well known to require a Description.

As the Fallow-deer lives entirely on Vegetables and Water, the Salts are not highly exalted; nor is it much inclined to an alkaline Putrefaction, on account of its Aliment. But the habitual Exercise of the Animal exalts and volatilizes the Salts in some degree. The Venison of a Deer, kill'd when cool, differs very much from that of one kill'd when heated with Exercise: The Fibres of the first are more hard, the Flesh more tough, and consequently less easily dissolvable in the Stomach. The second is more tender, more easily dissolvable, but has a greater Tendency to an alkaline Putrefaction; which, however, may be, in a great degree, prevented, by suffering the Deer to bleed plentifully when kill'd; as the *Jeaus* were directed to do with respect to all sorts of Beasts and Fowls, in *Leviticus*, C. 17. V. 13.

Upon the whole, however, Venison is esteem'd, and that justly, an excellent Aliment.

The recent Blood of the Fallow-deer, drank immediately after being taken from the Vein, is said to remove Dizziness of the Head.

The Gall is said to be detergent, to cure Dimness of Sight, and take away Films of the Eyes.

The Liver is recommended against a Diarrhœa.

The Horns are used exactly in the same Intentions as those of the Stag; and the Fat or Suet agrees in Virtues with that of the same Animal.

**DAMASCENA PRUNA NOSTRATIA**. Damsons. See *PRUNUS GALLICA*.

**DAMASCENA PRUNUS**. The Damask Prune. See *PRUNUS*, *fructu magno*; *dulci*, *atro-caruleo*.

**DAMASONIUM**. See *HELIORHINE*, and *ALISMA*.

**DAMNATA TERRA**. The same as *Caput Mortuum*. See *CAPUT*.

**DAMSIR**, or **DENSIR**. Sand. *Johnson*.

**DANAIS**. A Name for the *Conyza*. *Oribas. Coll. Med. Lib. 11.*

**DANICH**. A Weight of eight Grains. The Word is *Arabic*. See *LUPINUS*.

**DANTA**. The Name of a large *American* Animal, the Hoofs of which, scrap'd and powder'd, are esteem'd sudorific, good for the Epilepsy, and an Antidote against Poisons, taken from a Scruple to a Dram.

**DAPHNE**. The Bay-tree.

**DAPHNELÆON**, δαφνέλαιον, (from δάφνη, the Bay-tree, and έλαιον, Oil) *Laurinum*, or Oil of Bay, is prepared of the Berries when full ripe, and ready to fall off, by boiling them in Water, during which they transmit through the Husks a fat Substance, which, after compressing the Berries with the Hand, is taken off with Shells. Some, after they have inspissated Oil of unripe Olives with *Cyperus*, *Juncus odoratus*, and *Calamus*, cast therein the tender Leaves of the Bay, and boil them together; and some add the Berries, till it smells sufficiently strong; and others mix with them *Seyrax* and *Myrrh*. The mountainous and broad-leav'd Bay is the fittest for the Preparation of this Oil, which is best in its kind when recent; of a green Colour, very bitter, and acrimonious.

*Laurinum* has heating and mollifying Virtues, opens the Mouths of the Vessels, (ἀνατοματικὴν) and removes Lassitudes. It is beneficial in all nervous Disorders, Pains of the Ears, and Distillation; and it is an excellent Remedy, inferior to none, in Distempers of the Kidneys, contracted from Cold, the Parts being anointed with it; but, taken inwardly, it excites a Nausea. *Dioscorides*, *Lib. 1. Cap. 49.*

**DAPHNIA**. A Gem mentioned by *Pliny*, said to cure the Epilepsy.

**DAPHNITIS**. A Name by which the *Alexandrian* Merchants call'd the best Species of *Cassia*. *Oribas. Collect. Med. Lib. 11.*

**DAPHNOIDES**. A Name for the *Thymelæa*; *Laurifolia*; *sempervirens*; seu *Laureola Mas*. *Boerb. Ind. alt. Plant.*

**DARATOS**, δάρατος. An Epithet for Bread in *Nicander*, which imports its being unfermented.

**DARCHEM**. The choicest Cinnamon. *Johnson*.

**DARSIS**, δάρσις, from δέρω, to excoriate. Excoriation, or stripping off the Skin. It is sometimes used as an anatomical Term.

**DARTA**. A Tetter, Ringworm, or the Itch.

**DARTOS**, δάρτος. The Dartos, or fleshy Portion of the Scrotum, is a true cutaneous Muscle, the Fibres of which are, for the most part, strongly connected to the Skin, running thro' the cellular Substance, which lies between these two Portions, in place of a *Membrana Adiposa*, but without the least Appearance of Fat. This Muscle is thin, and, by the Disposi-tion of its Fibres, forms a Bag with two Cavities, or two small Bags, joined laterally to each other, and contained within the cutaneous Portion.

The lateral Parts of these two Bags, which are turn'd from each other, are longer than those which are joined together; and, by this Union, a Septum is form'd between the Testes, which may be call'd the *Mediastinum* of the Scrotum.

The Raphe, or Suture, adheres to the Edge of this Septum, and thereby braces down the Middle of the cutaneous Portion, which, from thence, appears to be divided into two Portions. The other Edge of the Septum adheres to the Urethra.

These two Bags of the Dartos are lined, on the inner or concave Side, by a cellular Substance, more considerable than that between the convex Side and the Skin; so that the fleshy Fibres, all the Way to the Septum, lie between two cellular Strata. They run thro' the outer Stratum, to be inserted in the Skin; and, by their Contraction, they form the natural Rugæ of the Scrotum.

These fleshy Fibres have likewise a strict Connection with the internal cellular Membrane, especially at the upper Part, below the Groin, where the anterior and external lateral Portions of the Dartos terminate by a kind of tendinous or ligamentary Expansion, which is strongly united to the internal cellular Membrane. I have often shewn this, as a particular *Fascia lata*, which gives Insertion to the Portions of the Dartos, and as a broad *Trænum*, which keeps the same Portions together.

The aponeurotic or ligamentary Expansion of the Dartos is fixed in the Branch of the Os Pubis, between the *Musculus Triceps* and the Origin of the *Corpus Cavernosum* of the same Side, all the Way to the lower Part of the Symphysis of these Bones. The internal Portion of these muscular Bags, or that which forms the Septum Scroti, is fixed to the Urethra by means of a Communication between the same ligamentary Expansion, and another, which is explained in its proper Place. *Winslow's Anatomy*.

**DAS**. The same as *DAIS*, which see.

**DASYMMA**, δασυμμα, from δασύς, rough, is a Disease of the Eyes, the same as *TRACHOMA*, which see.

**DASYPUS**, δαπύπυς, from δασύς, rough or hairy, and πύς, a Foot. An Epithet in *Galen*, *de C. M. S. L. Lib. 5. Cap.*



*Cap. 9.* for a Rabbet or Hare. *Castellus*. It generally imports a Hare.

**DASYS**, *δαρύς*, dense, thick, close, rough, in *Prorrh.* and *Coac.* is an Epithet for a Tongue condensed, contracted, and exasperated with Heat and Dryness, as it happens in Phrensies. *Galen* would rather have the Epithet *τεγχύς* used in such a Case, and adds, that *δαρύς* is, by some, apply'd to a Tongue which is the Cause of a Denseness or Roughness, that is, a Hoarseness of the Voice. *Δασύα γλῶττα* also mean the same as *περικύα*, (rigid) in *Coac.* and may import as much as when it is said of the Tongue, under a burning Fever, *πέρικε, σκληρύνεται, ἢ τεγχύνεται, ἢ παχύνεται*, "It becomes rigid, hard, dense, and rough;" tho' *Galen* asserts, that, by *δαρύα γλῶττα*, we are to understand no more than a moderate Roughness and Dryness of the Tongue.

*Δασύα ὕρα*, and *δεδασμένα*, in *Prorrh.* and *Coac.* are dense, thick, and very turbid Urines, with a rough or dense Superficies; tho' this Phrase is reckon'd by *Galen* among the obscure and purposely affected; of which there are many such in the *Prorrhetica*, and other suspected Works of *Hippocrates*. "Some," he says, "by *Δασύα τῶν ὕρων* understand "Urine of an unequal Superficies, exasperated with small "white Eminences like Hairs. Others take them to be frothy "Urine, which have a thin Spume unequally dispersed over its "Superficies; and others again will have them to be thick "Urine, with something hard on the Superficies as fine as Sand." In *Coac.* *δασυνόμενον ὕρον* is Urine which becomes dense or thick, and is opposed to very thin Urine, being reckon'd among the foul or turbid Sorts. It indicates, that Nature attempts a Concoction of the Juices; and portends a Sweat. In *Lib. 7. Epid.* *πάνυ δασύα ὕρα ἢ ἀνεσχημμένα*, "a very dense, and much "alter'd Urine," are join'd together, and portend a violent Pain of the Head, and Convulsions. Interpreters read *ἀνατεταραγμένα*, tho' all the Copies have it *ἀνατεταραγμένα*, for which we ought to read *ἀνεσχημμένα*. In *Coacis*, *ὕρον δασύον ἔχον διασπόμενον*, "Urine whose thick Contents are divided "into two Parts," prognosticates a Return of the Disease.

*Δασύα ἀναπνοή*, "a dense Respiration," in *Galen, Com. 3.* in *Lib. de Art.* is such as passes with a Noise, when the Organs of Respiration, either through the Straitness of the Place, or the Redundance of the Humours, or on both Accounts, are too much compressed, as it happens in hard, indigested, and lasting Tubercles of the Lungs. They who labour under this Disorder are call'd *κερχώδεις* (*Cerchodes*) ἀπὸ τῆς κέρχων, as *Galen* says, where all the Copies corruptly read *κερχώδεις* and *κέρχρην*.

*Δασύες*, *Aph. 34. Lib. 6.* are those who have their Heads adorned with Hair, in Opposition to the *φαλακροί* (*Phalacri*) the Bald and Smooth. The Epithet is used in the same Sense by *Aristotle, Hist. Animal. Lib. 3. Cap. 2.*

*Δασύα βλέφαρα* are expounded by *Galen, Com. 1.* in *Prorrh.* *τὰ τεγχύτητα ἔχοντά τινα μετεῖως*, "Eyelids which have a "moderate Degree of Roughness."

**DATURA.** See **STRAMONIUM.**

**DAUCITES VINUM.** Wine of the *Daucus* is prepared by putting six Ounces (I read *ὀγγύιας*, with *Saracenus*, not *<*, Drams) of bruised *Daucus* into a Ceramium of Must, and straining it off.

It is good for Pains of the Thorax, Hypochondria, and Uterus; provokes the Menfes and Urine; excites Eruclations; and is serviceable in Coughs, Convulsions, and Ruptures of the capillary Vessels. *Diosc. Lib. 5. Cap. 70.*

**DAUCUS.**

The Characters are,

It hath, for the most part, a fleshy Root: The Leaves are divided into narrow Segments: The Petals of the Flower are unequal, and shaped like a Heart: The Umbel, when ripe, is hollow'd and contracted, appearing somewhat like a Bird's Nest: The Seeds are hairy, and in Shape of Lice.

*Boerhaave* mentions seven Species of this Plant; which are,

1. *Daucus*; vulgaris, *Raii Synop. 3. 218. Merc. Bot. 1. 32. Phyt. Brit. 34. Tourn. Inst. 307. Elem. Bot. 257. Boerh. Ind. A. 62. Daucus vulgaris seu nostras, Offic. Pastinaca sylvestris tenuifolia, Ger. 873. Emac. 1028. Merc. Pin. 901. Pastinaca sylvestris tenuifolia Dioscoridis, vel Daucus Officinarius, C. B. Pin. 151. Mor. Umb. 31. Hist. Oxon. 3. 305. Pastinaca sylvestris seu Staphylinus Græcorum, J. B. 3. 61. Raii Hist. 1. 465. Chab. 390. Staphylinus, Dill. Cat. Giff. 150. Staphylinus sylvestris, Rivin. Irr. Buxb. 313. Rupp. Flor. Jen. 224. WILD CARROT, OR BIRD'S-NEST. Dale.*

The wild Carrot has a Root somewhat thick and fleshy, but much less than the Garden Kind, with many pretty large, hairy, winged, and finely divided green Leaves, finer and more hairy than Garden Carrots: The Stalk grows two or three Foot high, divided into several Branches, full of smaller Leaves, and having at the Tops pretty large flat Umbels, of white small Flowers; and, when these are fallen off, the Umbels close themselves into a hollow round Form, like a Bird's Nest, containing a great many Seeds, which, when ripe, are flattish, rough, and hairy. It grows frequently in pasture Grounds,

and in fallow Fields, flowering in June, and the Seed is ripe soon after, which is the only Part used.

The Seed, infused in Ale, is accounted an excellent Diuretic, and good to prevent the Stone, and to render its Fits less violent: It brings away Gravel, and provokes Urine, as it does also the Menfes; and is useful in uterine and hysteric Disorders.

*Helmont* informs us, that he knew a Lawyer, who was seized with a Fit of the Stone every fifteen Days, freed from the Attacks of his Disorder for several Years, by means of an Infusion of *Daucus*-seed in clear Malt Liquor. Two Drams of the Seeds, infused in White-wine, and drank, are said to cure hysteric Paroxysms. *Tragus*, and several others, warmly recommend the small purple Flower, in the Middle of the Umbel, as an infallible Antidote against an Epilepsy. *Raii Hist. Plant.*

2. *Daucus*; fativus; radice albâ. *T. 307. Pastinaca, tenuifolia, fativa, seu hortensis, radice alba. M. U. 31. C. B. P. 151. M. H. 3. 305. Pastinaca, fativa, seu Carotâ alba. J. B. 3. 2. 64. b. THE WHITE CARROT.*

3. *Daucus*; radice, & umbellâ, luteis. *T. 307. b.*

4. *Daucus*; fativus; radice aurantii coloris. *T. 307. b. THE ORANGE-COLOUR'D CARROT.*

5. *Daucus*; fativus; radice atrorubente. *T. 307. Pastinaca, tenuifolia, fativa, radice atrorubente. C. B. P. 151. M. H. 3. 305. Pastinaca, fativa, seu Carotâ rubra. J. B. 3. 2. 64. Pastinaca, fativa, rubens. Dod. p. 678. b. DARK-RED ROOTED GARDEN-CARROT.*

The Virtues of the Seeds and Herb are the same with those of the *Daucus Officinarius*. According to *Schroder*, it is accounted a Specific in hysteric Fits.

The Roots are used in Kitchens, and the Method in which some prepare them is, to cut them into Slices, boil them, and eat them with Butter, Pepper, and Salt. But, in *England*, the most common Method of preparing them is, to boil them with Flesh-broths, especially those prepared with Beef; and, when thus managed, they are eaten along with the Flesh instead of Turneps. They are somewhat flatulent, but are thought to render the Body soluble, and contribute to the Cure of a Cough. *Quercetan* affirms, that half a Dram of the Seeds of white Carrot dry'd and powder'd, exhibited with Balm-water, is a Specific against hysteric Fits. *Raii Hist. Plant.*

6. *Daucus*; folio tordylli; flore albo; altissimus. *Caucalis, daucoides, altissima, Pastinacæ sylvestris folio, flore albo. H. Maur.*

7. *Daucus*; maritimus; lucidus. *T. 305. Pastinaca tenuifolia, marina, foliis obscurè virentibus, & quasi lucidis. Bot. Monsp. Pastinaca, folio ænanthes. Bocc. Rar. 74. Gingidium, folio Chærophylli. C. B. P. 151. Boerh. Ind. alt. Vol. 1.*

In the *Historia Plantarum*, ascrib'd to *Boerhaave*, we read that the Root is much celebrated for its Virtues against the Stone, and nephritic Disorders, and for provoking the Menfes. The Seeds, gather'd in the right Season, are endu'd with an Acrimony; and, being infus'd in Beer, are highly beneficial in the fore-mention'd Distempers. The Roots of the first, second, third, and fourth Species, afford excellent Nutriment, and are very proper Food for consumptive Persons. Empirics rasp the Root, and boil the Raspings in Milk; then sweeten it with Honey, and exhibit it in all Diseases of the Breast, and in Quinsies, and externally, to prevent Ulcers from contracting a Crust: They give it also in Pains after the Birth, the Colic and Strangury. It is one of the most considerable culinary Roots, and strengthens and fattens the Body.

**DAVERIDON.** Oil of Spike. *Johnson.*

**DAULONTAS**, *Daulontas Frutex* (*G. Pison.*) is an American Shrub, about a Man's Height, and very full of Branches, which so spread and extend themselves in Gardens, that they are obliged to restrain them by Lopping and Burning. The Leaves resemble those of the Balsam-tree, being jagged at the Edges. The Flowers grow in Clusters, like those of the Elder-tree, and are succeeded by Flowers of a bitter Taste.

This Plant has the Smell, and other Properties, of Chamomile; and the Flowers are used in Fomentations and Cataplasms, as emollient, discutient, and resolvent. The Berries are of Service, taken inwardly, for the Asthma, to provoke the Menfes, and in the Colic. *Lemery des Drogues.*

**DAUMUR.** A Species of Serpent, entering the Composition of the *Theriaca*. *Johnson.*

**DAURA.** A Term used by *Paracelsus* for black Hellebore. Some call it *DURA*.

**DEACUMINATA.** The same as *ΑΡΟΧΗ*, which see.

**DEALBATIO**, λευκοσμός, λεύκασις. A Whitening. It is a Part of Cosmetics, as when we say, a Whitening, or Dealbation, of the Teeth, Cicatrices, or the like. It is also a Term in Use among some Professors of the spagirical Art, for the third Operation of the Process of the Philosophers Stone. *Paracelsus*, in his *Manual*, teaches artificial Ways of whitening Metals; and *Junker*, in his *Lexicon Chymicum*, shews two Ways of whitening Copper. *Castellus.*

**DEARGENTATIO.** A Tincturing of the baser Metals, for Instance, Copper, with the Colour of Silver.

DEARTI-



DEARTICULATIO, διαρθρωσις. The same as ABARTICULATIO, which see.

DEASCIATIO. The same as APOSCERNISMUS, which see.

DEAURATIO. A superficial Tincturing of Metals, Money, and the like, with the Colour of Gold. I don't know, that it relates to Medicine, unless because Pills and Boluses are sometimes gilt.

DEBESSIS. A Tortoise. *Rulandus*.

DEBUS. A Term in *Paracelsus*, *Tract. Apoc. de Pulver.* by which he would signify a Remedy against Anger.

DECAMYRON, δέκαμυρον, from δέκα, ten, and μύρον, Ointment. The Name of a Malagma in *Oribasius*, so call'd, because it consists of ten different Aromatics. It consists, according to *Myrsus*, *Secl. 9. of Indian Leaf*, Mastich, Euphorbium, Spikenard, each four Scruples; Styra Camitis, Adace, each six Scruples; common Pepper, four Scruples; Ointment of Nard, four Ounces; Opobalsamum, Wax, each five Drams one Scruple.

DECANTATIO, κατάχυσις, the same as DEFUSIO, is when a Liquor is gently pour'd off from some precipitated Matter, without Straining or Filtration. *Castellus*.

DECANUS, δεκανός, in former times was taken in a bad Sense, to signify a Juggler; as appears from *Galen*, *Lib. 6. de S. F. a little after the Beginning*. *Castellus*.

DECATORTHOMA, δεκατόρθωμα, from δέκα, ten, and ὀρθώω, to direct, or prepare, is a Medicine compounded of ten simple Ingredients. *Castellus*.

DECEMBER. *Actius*, *Tetrab. 1. Serm. 3. Cap. 163.* places the Winter Solstice on the twenty-third of this Month; which, if not exact, is yet sufficient to shew, that we are fallen back at least ten or eleven Days in our Computation of Time according to the *Julian Year*.

DECIDENTIA, κατάπτωσις. See CATAPTOISIS. It is also a Word by which we render μετάπτωσις, which, in *Galen*, *Com. 1. in Prognost. Hippocr.* and in other Places, signifies some Turn or Alteration in acute Diseases, whereby they are prolonged from fourteen to twenty, and sometimes to forty Days.

DECLARATIO, INTERPRETATIO, EXPLICATIO, ἐξήγηση, ὑπόστιξις. The same as EXEGESIS, which see.

DECLINATIO, παρακμή, the Decline, is that Time of a Disease in general, or of a particular Paroxysm, when Nature gets the upper Hand of the Disease, and there is a Remission of the Symptoms; it succeeds the State or Vigour of the Distemper. *Declinatio*, in *Avicenna*, is a State of Dislocation, or imperfect Luxation, when the Bone is not totally remov'd from its Seat.

DECOCTA, δέκωκτα, is Water once boil'd or heated, and cool'd in Snow, for the sake of quenching the Thirst in a more grateful manner. *Galen* gives an Account of it in *Lib. 7. Meth. Med.* And *Pliny*, *Lib. 31. Cap. 3.* says, "It was an Invention of the Emperor *Nero*, and a very subtle one, first to boil Water, and then to cool it by sinking it in a Glass Vessel in Snow, by which means he had all the Pleasure of a cooling Draught, freed from the ill Qualities of the Snow; for it is agreed, that Water boil'd is most salutary; and it is capable of the greatest Refrigeration after it is heated."

DECOCTIO, ἐψυσις, ἀψυσις. Decoction.

The Word *Decoction* comes from the Latin Word *Decoquere*, which signifies to boil. The End of Decoction is either to dissolve the active and serviceable Parts of mixed Bodies in a proper Liquor, or to mollify these Bodies, by boiling to such a Degree, as that we may be able to separate their pulposus Parts from them.

The general Subjects of Decoction are Animals and Vegetables, and sometimes Minerals, as Antimony and Quicksilver. The Liquors which serve to boil them are Water, Wine, Vinegar, Milk, and Whey.

As Decoctions ought to be as different as the Purposes for which they are designed, it would be difficult to establish Rules concerning the Proportion of the Water to the Ingredients boil'd in it; only we may say in general, that the harder and more compact the Drugs are, the greater is the Quantity of the Liquor in which they require to be boil'd.

Decoction ought sometimes to be preceded by Infusion, that the Liquor may have sufficient time to extract the Substance of the compound Body; as when we make a Decoction of the Roots of Sarsaparilla, or the Woods of Guaiacum, or Box.

We must avoid, as much as possible, boiling of Aromatics, because their volatile Principles, which are the most essential, are dissipated in Boiling: The best Way is, to infuse them in hot Liquor in a Vessel well cover'd.

When we design to make a Decoction of several Sorts of Ingredients, we begin with boiling Barley, Shavings of Hartshorn and Ivory, and the Roots of Quich-grass, over a moderate Fire, for half an Hour; then we put thereto other Roots, newly gathered, as those of Succory and Sorrel, washed and cleansed from their Strings, and cut in small Bits, suffering them to boil together for one Quarter of an Hour; after which we put in Fruits, first cleansed from their Rinds and Kernels,

and cut in Pieces, if they are large: To these we add chopped Herbs, and bruised Seeds, and then Flowers and Liquorice, letting them boil gently. After a sufficient time we pour the Whole into a Vessel of Earth or Tin, into which we had put bruised Cinnamon, yellow Sanders, Rasplings of Sassafras-wood, and other Aromatics; we cover the Vessel, and, when the Decoction is cool, strain it, squeezing the Ingredients; and then let it stand in order to depurate, and become clear.

If you think fit to have your Decoction enriched with Animals, as Cray-fish, Frogs, or Vipers, you must put them in at the Beginning, always avoiding to make too great a Fire, for fear of causing too great a Dissipation of the volatile and essential Salts. *Lemery Pharmacopée*.

*Boerhaave* has, in the second Volume of his Chymistry, laid down some excellent Rules both for the Preparation and Use of Decoctions, Infusions, Robs, Sapas, &c. from Vegetables.

Take the Remains, says he, of Rosemary, after a Water has been procured from it, by the cold Still, in the manner directed under the Article AQUA, which have now lost their Verdure, Plumpness, and Succulency, and are become brown, contracted, shrivel'd, lighter, and almost without the natural Smell, and of a Taste somewhat foreign from that of Rosemary. The whole is now brittle, which before was supple, soft, and viscous; all which may appear by comparing this Remainder with the recent Plant. Instead hereof we may take a Plant gently dry'd, but not too long, in the open Air of a shady Place, or even what is fresh-gathered; for this will make no considerable Difference, because the Water, which comes over in the Distillation above-mention'd, is always lost in the Boiling.

To the Subject, put into a clean Vessel, pour pure clean Rain-water, heated from eighty-five Degrees to the Degree immediately under Ebullition, which is, that of two hundred and eleven. Let the whole Plant be well cover'd with the Water, which must now stand together, in a close Vessel, in this Degree of constant Heat, for the Space of half an Hour or more. Then pour off the Liquor, which will now appear brown-colour'd, and have but little Odour, being deprived of the Taste of the Rosemary, found in the Water of the Process above-mention'd.

This is call'd the Infusion of Rosemary, and contains the Virtue of the Plant but little alter'd. If the Water above-mention'd be mixed with it, it will advantageously contain the peculiar Virtue of the Plant for Medicinal Uses. And, perhaps, this is the best Manner of conveying the Medicinal Virtues of Herbs into the Body, unless it be in the Form of express'd Juices.

If the Plant be boil'd for some Minutes with Water, the Liquor then pour'd off is call'd a Decoction, or Apozem. If this be made in an open Vessel, all the Water of the Process above referred to is lost, besides much other Matter. If the Operation be here perform'd in a very tall Chymical Vessel, fitted with a Still-head and a Receiver, and the Water that comes over be afterwards added to the Decoction, the Whole will then have the principal Medicinal Virtue of the Plant; and, if the Operation be performed in *Papin's* Digester, the Decoction will then have the united Virtues of the Plant, without any Loss of the Spirit or Water above referred to. But the peculiar Virtue of the Plant is here changed, as appears both by the Smell and Taste, and, in some degree, by the Effect; and it is extremely difficult, in all these Cases, to preserve the Odour, Taste, and Colour perfect.

Upon the Remains of the first Decoction pour boiling fresh Water; make it constantly boil; then pour off the Decoction, and carefully take off, with a clean Spoon, all the Froth which rises in the Boiling, setting it apart in a clean Vessel. This Matter is unctuous, and, when gently dry'd, burns in the Fire. Continue to pour on fresh Water, pour off the Decoction, and collect the Froth, taking care to avoid the Admixture of any foreign Matter, as Soot, Smoke, or the like, till the Water, at last pour'd on, comes off, after a long-continu'd Boiling, as pure, tasteless, and colourless, as it was when put on, which will happen about the twentieth Repetition. After this, it will be surprizing to observe the Leaves of the Rosemary remaining entire, turgid with Water, of their original Form and Size, but having exchang'd their green Colour for a brown, and being sunk to the Bottom of the Water, wherein they floated before.

The denser the Plant is, and the more resinous, the more oily Froth is thrown to its Surface; and the less of the resinous or oleaginous Virtue communicated to the Water, because not dissolved therein; and therefore, for preparing a Decoction of this Kind, a long previous Digestion, or the Addition of a fix'd alkaline Salt, and, afterwards, a longer Boiling, are required, as in making the Decoction of Guaiacum-wood.

But the native saponaceous Virtue of such Vegetables, rich in Resin, preserves their resinous Parts in a State capable of Solution, if boil'd whilst fresh, green, and succulent; but this Resin, when dry, acquires a firmer Texture, and becomes more difficult of Solution. This has been observed by those, who, in *America*, have boiled the Chips of green Guaiacum in Water; whereby they soon obtain'd a very penetrating



penetrating Liquor, which cures the Venereal Disease; whilst the Wood, that has been long kept, being now less soluble in Water, has a less Effect.

Since, therefore, Plants lose, by Boiling, all that which goes off in the Form of Vapour, with two hundred and twelve Degrees of Heat, all those Plants are unfit for this Operation, whose Virtue required is volatile with this Degree of Heat. But those, whose Virtues reside in a more fix'd Matter than can be separated by this Heat, are fit for Decoction. Of this Kind are the following acid, astringent, viscous, aromatic, emollient, cooling, nutritive, restorative, and saponaceous Vegetables, and all viscid ones, that are not too resinous.

|                  |                  |
|------------------|------------------|
| Acacia,          | Nettles,         |
| Barberries,      | Plantain,        |
| Brook-lime,      | Periwinkle,      |
| Cinquefoil,      | Poppies,         |
| Comfrey,         | Purslain,        |
| Cranes-bill,     | Quinces,         |
| Currants,        | Rhubarb,         |
| Dandelion,       | Roses,           |
| Dwarf Elder,     | Scordium,        |
| Endive,          | Shepherds-purse. |
| Fern,            | Sloes,           |
| Fumitory,        | Sorrel,          |
| Gentian,         | Speedwell,       |
| Grass,           | Succory,         |
| Ground-ivy,      | Sumach,          |
| Hellebore,       | Tamarinds,       |
| Hypocistis,      | Tormentil,       |
| St. John's-wort, | Water Lily,      |
| Knot-grass,      | Wood Sorrel,     |
| Myrtle,          | Wormwood.        |

To these may be added the fresh express'd and unfermented Juice of Summer-fruits.

Let it, however, be carefully observed, that I do not suppose, that the peculiar Virtue of a Plant, which commonly resides in its presiding Spirit, should always shew itself by some remarkable Odour, Fragrance, or aromatic Taste: On the contrary, it may happen, that the Spirit shall be extremely active, without remarkably affecting the Senses; as appears in the black Hellebore-root, the *Cicuta aquatica Gesneri*, the *Solanum maniacum*, and the like: Whence all these Particulars are very cautiously to be consider'd, before any general Rule is laid down.

#### *The Nature, Virtues, and Effects, of these Infusions and Decoctions.*

1. These Preparations may pass thro' the lacteal and mesenteric Vessels, and mix with the venous Blood in the Vena Cava; and thus, by the vital Motion, be mix'd with the Humours of the Body, received into all the larger kinds of Vessels, reach to the Viscera; and all the other Parts of the Body; for they are saponaceous, penetrating, and miscible with every Humour.

2. And here they may act by their own peculiar Force, remaining in the Liquor of the Infusion or Decoction; which Faculty of Action is then greatly increased by the Force of the vital Motion, and thus produces sudden Effects.

3. But they want that Efficacy which depends upon the fine volatile Spirit, that resides in the Water, procured by Exhalation, as describ'd under the Article AQUA; tho' the Infusion contains more of it than the Decoction. But in the Decoction, however, this Want is supply'd by a greater Efficacy, which the boiling Heat communicates thereto, by enabling it to dissolve, and intimately mix the Virtues of the Plant with the Water, by long boiling: Whence, if the Operation were perform'd in a Still, with its Alembic-head, and the exhaling Water return'd to the remaining Decoctions, then these Decoctions would become exceedingly rich in the Virtues of the Plant.

4. It must be well consider'd, that the medicinal Virtue of Infusions and Decoctions depends as much upon the Efficacy and Quantity of the hot Water received, as upon the Virtue of the Plant. This is known to Physicians. Were it not an Error, in condemning the Use of Tea, to attribute the Mischief wholly to the Leaves, when the larger Part is hot Water? And again, when we attribute the Virtue of enlivening the Spirits to the drinking of Tea, is the diluting Virtue of hot Water to be omitted?

5. Hence may be understood the pharmaceutical Law, Method, Instrument, Subject, and Effect, of preparing Infusions and Apozems; as also the Efficacy of the hottest Water upon the Solids of a Plant. Who, but an Eye-witness, would believe, that a two Days boiling should not, with all its Force, destroy the tender Leaves of Rosemary? And, what is more, tho' the tenderest Flower were to be ever so long boil'd in Water, yet, upon taking it out, and carefully examining it by the Eye, or even with a Microscope, it will be found perfectly unaltered. I have made the Experiment, and continued the Boil-

ing for a very long time; yet, at length, found all the Hairs; little Risings, Tubercles, and Fibres, the same, without any Difference: From hence Physicians may understand, why the smallest Vessels of our Bodies are not dissolved by the hot Juices they convey. Some may suspect, that the mechanical Triture, which the Force of the Pulsation makes against the Sides of the Canals, should rather break them than the Power of Heat and Moisture; but the last Elements of our Solids are not so much saline, saponaceous, or oily, as merely terrestrial, and join'd together by a certain Cement. For what we have above said, concerning the Force of boiling Water upon Vegetables, is also true of the Parts of Animals, treated in the same manner.

6. If the Leaves, remaining after this Operation, be dried, they become shrunk and small; but, if again steep'd in hot Water, they exactly recover their former Size and Figure.

7. But some of the peculiar Virtues of Plants are alter'd by the Boiling. *Amum* grows milder by Decoction; the crude Juice or Infusion of *Ajrabacca* proves strongly emetic; but this Virtue, by long-continued Decoction, is changed to another, which is diuretic and aperient. *Boerhaave's Chymistry*, Vol. 2.

#### *The SAPA, DEFUTUM, EXTRACT, ROB, and JELLY.*

Having examined the Infusions and Decoctions of Plants, it will be proper to try, first, what will remain upon evaporating the Water employ'd in these Preparations; for thus that Part of the Plant will gradually appear, which gave it its Virtues; and thence may also be chymically known the Nature of all those Parts of Vegetables, which are soluble in hot Water, and may be extracted by its means.

Let the Infusions or Decoctions, mention'd above, stand at Rest for some Hours, in a cool quiet Place, and in a clean Vessel, cover'd on the Top, that they may thus deposite their gravelly Earth, and other gross or ponderous Feculencies, not belonging to the Plant itself. They may also be pass'd thro' a Strainer, till they become clear; but, then the gummy, somewhat resinous, and viscous Parts belonging to the Plant, will be also separated; and thus, indeed, they may be obtain'd the purer for medicinal Use, tho' they lose something requisite in their chymical Examination. The Apothecaries, requiring them extremely pure, have another Method: They intimately mix the recent White of Eggs with their Decoctions, by long whisking them together; then boil the Whole, whereby the White of the Eggs, now harden'd by the Boiling, concretes together in the Decoction, and; at the same time, entangles the grosser Matter with itself; so that now the Liquor, being strain'd; leaves much gross Feculency behind, and passes sufficiently clear. And these are the three Ways of purifying Decoctions, that is, by Rest, by the Strainer, and by Whites of Eggs; the former whereof is suited to chymical Examinations.

Let the Liquors, thus purified, be put into a clean cylindrical open Vessel, or one which widens upwards, and set over a clear Fire, and there kept nearly in a State of Boiling, so as to exhale, and acquire the Consistence of thick Honey; with Care to avoid boiling strongly, for fear of exhaling off what should be left behind, and to prevent Burning at the last, which would destroy the Virtue.

The same Preparations may be likewise obtain'd from the fresh express'd Juices of Plants; particularly the Juices of Summer Fruits, and succulent Roots, such as Liquorice:

These Subjects being taken ripe, recent, and perfect, and being first cleansed and bruised, the Juice is to be express'd, diluted with Water, and purified by Rest, and the Strainer; and then to be exhaled, in the Manner above-mention'd, to the natural Consistence they had upon Expression. The Juice, thus fresh express'd, or reduced to its natural Consistence, after having been diluted and strain'd, may be call'd Must; and, when this Must is boil'd to one Half, so as to be long preserved, and possess'd of its natural Taste, it has been call'd Sapa; but, if boil'd, till only a third Part remain'd, it has been call'd *Defrutum*, which may be preserved still longer, without losing its former Nature: But when the Liquor is at first extremely well purified, and again gently boil'd, till a Drop, let fall on a cold Plate, grows firm and transparent, almost like Ice, it is call'd Jelly. If it have the Consistence of thin Honey, it is call'd a Syrup; if somewhat thicker, a Rob. All these Preparations are indifferently call'd Extracts, which are therefore term'd liquid, thick, or sometimes solid.



1. All the foregoing Preparations may be dissolved in warm Water, and then they resemble the Decoctions from whence they were made; tho' they have, by their Boiling, lost some of their former Virtue.

2. They may be long kept without spoiling, even for Years.

3. They retain much of the Taste of the Vegetable, tho' the volatile Part is lost in the Preparation.

4. They long preserve the Virtues of Plants entire, and free from the Incumbrance of their vascular Parts; such Virtues, we mean, as remain'd in them after this Preparation; for so much they long preserve uncorrupted.

5. Hence it appears, what it is that Plants lose by long keeping, and corrupting with Age; for hot Water extracts nothing from the Plants so corrupted, all the Juices being gradually wash'd out of such dead Plants, which are reciprocally penetrated, dissolved, agitated, and dried by the Moisture of the Air, Dew, Rain, and Heat of the Sun; whence they become effete and dry Skeletons of Plants. The Worm also consumes the Juices of Vegetables, so as, at length, to leave nothing but a mere solid, insoluble, sluggish, and terrestrial Plant.

6. They who make long Voyages may receive great Advantage from the Productions of this Process. Sailors are subject to Diseases from the Use of Meats much salted, dried, and smoked, which Diseases are remedied by the Juices of Fruits; and thus, by dissolving the Jelly of Oranges, Barberries, Cherries, Quinces, Lemons, China Oranges, Currants, Grapes, Rob of Elder, Rob of Juniper, and the like, in Water, they may have a present Remedy. These Preparations are also easily recruited, when they touch at any Fruit-island; and, perhaps, nothing would more conduce to the Health of the *British* and *Dutch* Sailors, than a due Provision of this Kind.

It must, however, be observed, that the Juices abounding with Salt are difficultly preserved, when thus thicken'd, from running in the Air, Salt being attractive of Water. The Method, therefore, is to keep them in well-stopt Glasses. And, lastly, those vegetable Subjects are unfit for this Operation, whose medicinal Virtue is volatile. *Boerhaave's Chymistry*, Vol. 2.

DECOLOR, *ἄχρους*. See ACHROI.

DECOMPOSITUM. A Word which augments the Signification of *Compositum*. In the *Physica Trismegisti*, *Theat. Chym.* Vol. 1. we are told, that *Composita* are such Things as suffer Corruption, and are compounded; but *Decomposita* are Things united in Composition, by means of Corruption and Generation. *Castellus*.

DECORATIO, *κόσμησις*. A Preservation or Festoration of natural Beauty, either in the whole Body, or in some Part of it. *Castellus*.

DECORTICATIO, Decortication, is when any Thing, as a Root, Seed, Fruit, or the like, is deprived of its Bark, Shell, Rind, Skin, or any of its containing Husks. *Blancard*.

DECOSTIS. The same as *APLEUROS*, which see.

DECREMENTUM, *παρῃμι*, a Decrease, is either spoken of that Time of Age which succeeds the *Ætas continens*, "the staid Age;" and is otherwise call'd *Ætas decrescens*, "the decreasing Age;" or else of a Disease, in which Sense it is the same as *DECLINATIO*, which see.

DECREPITATIO, or simply *CREPITATIO*, *ψόφος*, is the crackling Noise which Salts make, when subjected to the Fire. Hence common Salts, when exposed to a gentle Fire, till it will decrepitate no longer, is call'd decrepitated Salt.

DECRESCENS, *παρῃμιαστικός*. See DECREMENTUM.

DECRETORIUS. The same as *CRISIMOS*, which see.

DECRUS. The same as *ASCRIES*, which see.

DECUBITUS. The Manner of Lying.

Every Physician knows, that the principal Indications of the Strength or Weakness of the motive Faculty are taken from the Decubiture; and, indeed, we may, with very good Reason, judge of the State of that Faculty by the Decubiture itself; for the Motion, which is exerted at the time of Decubiture, depends on two Things; that is, the Faculty which moves the Members, and the Body itself, with its Members, moved of themselves. This latter Motion is observed in Carcasses, and Persons expiring, who are impel'd downwards by the Force of Gravity; the former belongs to Persons in Health, or just beginning to recover out of Sickness. *Diocles* was certainly in the Right, when he said, that the Bodies of Animals consisted *ἐν τῷ ἐσθέρῳ, ἢ τῷ ἐκσθέρῳ*, "of the carrying and the carried." For it is the Soul which carries, and the Body that is carried: This last is naturally carried downwards by its Gravity; the other moves the Members upwards or downwards, forwards, backwards, or sideways, at Pleasure; or holds them in a manner suspended in the Air, while it contracts, extends, or stops the Muscles, lest they should slide downwards

by their proper and elementary Motion. When, therefore, it happens, that Bodies are scarcely moved, turn'd, or erected, but easily slide downwards on account of their Gravity, it indicates to us, that the Animal Faculty is, in a very great measure, extinguish'd and resolved; for, while it remains entire, without Diminution, the Body is easily moved, turn'd, and erected at the Pleasure of the Patient, and the Arms, Hands, and Head sustain'd in the Air: And this it is to live, or this is Life, which continues so long as the Soul remains firmly united to the Body; but a Disunion between them is succeeded by Death. In Cases, therefore, where the Soul has great Power and Prevalence, we observe Decubitures of good Presage; but the contrary, when the Faculties of the Soul are weak and languid. But, first, let us treat of good Decubitures, and shew how to form our Prognostics from them in acute Disorders. In *Coac. Prænot.* 497. it is written, that the best Decubiture is such as is usual in Health, and very justly; for a Person, who labours under a dangerous Distemper, can by no means lie down in the same Manner, or lie in the same Posture, as when in a State of Health. Where the Strength is broken, the Patient is delighted with a supine Decubiture, the Legs and Arms distended, restless, and uneasy, incapable of continuing in one Posture, or keeping the same Form of Decubiture. Persons in a Delirium throw themselves out of Bed, expose their Feet, and even Pudenda, and sometimes leap out of Bed on a sudden. Dying Persons, by reason of Weakness, slide downwards towards the Feet. Wherefore a Decubiture usual in Time of Health, or like that of healthy Persons, may justly be reckon'd the best, and signifies, that the Disease is not malignant or dangerous. Such a Decubiture is commended also by *Hippocrates*, in *Prognost.* where he says, "That to lie in the Posture of healthy Persons, is very salutary; but best of all, when the Patient can easily turn his Body, and raise it with Alacrity," can lie down, or stand, and support his Members; for a prompt and expeditious Performance of these Actions declares Strength in the Nerves, Plenty of Spirits, and Soundness of the Animal Faculty. The Author of the *Coac. Prænot.* 494. thus expresses it: "It is good, says he, when the Patient can turn his Body with Ease, and raise himself up with Alacrity." And *Hippocrates*, in *Progn.* speaking of the best Decubiture, says, "That the Physician ought to find the Patient lying on the Right or Left Side, with the Arms, Neck, and Legs, a little retracted, and all the Body in a lax and easy Position, as is usual with most who are in Health: Now to lie in the Posture of healthy Persons, is a most salutary Sign." Hence we conclude, that there are three Things requisite in a very good Decubiture; first, that the Patient lie on either Side; because, as *Galen* teaches, in his Comment on the Passage, such a Decubiture indicates the Strength of the Faculty, which fixes the Body by the Muscles; as the Weakness of the same is signify'd, when the Patient is incapable of lying on his Side. A second Requisite is, that the sick Person lie with the Arms, Neck, and Legs, somewhat retracted, because this is the usual Posture of Persons in Health. The third and last Thing requisite is, that the Body be disposed in a soft and easy Position. *Galen*, in his first Book of *Humours*, *Text.* 24. says, that "the whole Body ought to be moist, not dry;" not, as some think, that all Parts of the Body ought to be equally warm and soft; but, as *Galen* rightly observes on the before-quoted Passage, in *primo Progn.* as to the second Thing required, that the Body of the Patient ought to have the Arms, Neck, and Legs, a little retracted, or drawn in, but by no means to have them retracted or extended to an immoderate Degree: And, because all Things which are in a State of immoderate Tension, seem to be dry, he therefore commended a Body in a soft Position, that is to say, a moist, and not a dry State of the Body. *Galen*, in *Comment.* expresses the same thus: "Immoderate Postures, says he, such as an extraordinary Extension of the Nerves, are pernicious; as we have before declared in our Treatise of muscular Motion." Now a Medium, between two immoderate States is by no means a State of excessive Tension; therefore he call'd it easy, because Bodies remarkably easy are not in an extraordinary Degree of Tension. He explains himself yet more clearly, *Lib. 1. de Humoribus*, *Com.* 24. Wherefore, as he says, the Arms and Legs ought to be a little retracted, that the whole Body may lie in a Posture free from Extremes: I call Extremes in Posture, or Figure, such as are form'd by a long Extension, or Flexure, either of the Joints or Spine, which are not effected without an immoderate Extension of the Nerves. So much for the best Ways of Decubiture, which, with other good Signs, prognosticate a happy Event. See *ACAMATOS*. We proceed to treat of a bad Decubiture.

We know, in general, from the Premises, that every Decubiture, or Posture of lying, which is unlike that of Persons in a State of Health, is to be condemned: For, as it has been already observed, that it is a pretty good Sign when the Patient rises up with Alacrity, or turns in his Bed with Ease, because it indicates the Vigour of the animal Faculty which moves; so when these Motions are performed after a dull, heavy,



heavy, and painful Manner, it shews the weak and languid State of the same Faculty. Agreeably to this, we read, *Coac. Prænot.* 493. "that a Heaviness of the whole Body, and " of the Hands and Feet, is an ill Sign;" and especially if the Muscles are not oppress'd with a Plenitude, or there has not preceded a sudden Evacuation, or some other manifest Occasion. If with this Heaviness, which shews an Injury to the motive Faculty, says the Author of the *Coac. Præfag. Ibid.* "there be joined a Lividness of the Nails, Death " is at hand;" because the Heaviness of the Body shews a Defect of the animal Faculty; and a Lividness of the Fingers and Nails is an evident Proof, that the natural Heat, which proceeds from the Heart, is extinguished. A supine Decubiture, by *Hippocrates, in Prognost.* where he says, "that " to lie in a supine Posture, with Legs and Arms extended, " is but an indifferent Sign;" but, in *Coacis* 497. it is more properly pronounced "no good Sign." And *Galen, in Comment.* says, that such a Sort of Posture can by no means be accounted a good Prognostic, which he demonstrates from *Hippocrates*; he also says, in the same Place, that if this supine Posture be attended with a sliding downward, the Danger is the greater; as if such a Posture was not without Danger. But as for *Galen*, he thinks a supine Decubiture of no great Moment, so as to prognosticate Death or Recovery from it.

Some, however, judge a supine Decubiture to be good, because the Sick, under the vehement Fatigues occasion'd by the Distemper, find most Relief in that Posture; under which all the Muscles, except those of the Thorax, are at Rest; and by this supine Position of the Body we rest ourselves on the lowest and heaviest Part, as a Ship on its Keel; and, besides, the exhausted animal Strength and Spirits can by no other Decubiture be better supported, and such a Posture also conduces to the Expulsion of Stones from the Kidneys and Bladder. But if, on these Accounts, it may be called a good Decubiture, there are many other Reasons why it should be judged a bad and pernicious Posture of lying: For the Muscles of the Thorax, which under this Position ascend in Inspiration, are more fatigued when a Man lies on his Back, than when he is erect, or lies in any other Posture. This Decubiture also, if long continued, is the Cause of Disorders, and those of the most dangerous kind; as the Epilepsy, Incubus, Palsy, and Apoplexy: For in this supine Position the Humours and Vapours are more easily attracted to the hindermost and noblest Ventricle of the Brain, and Distillations fall upon the Thorax and Kidneys. However, our present Business is not to consider this Posture as the Cause of good or ill Effects to the Body, but as a Sign conducing to Prognostics: in which respect we say it always signifies a Weakness of the motive Faculty; for all who lie in a supine Posture, unless they are accustomed to it, are in a weak State. But then this supine Decubiture is sometimes arbitrary, and chosen out of a kind of Softness or Indolence of Mind, or from Sorrow; and sometimes the Patient lies in this Posture thro' the Vehemence of the Paroxysm, or, to mention no more, on Account of some extraordinary Evacuation: In such Cases nothing certain can be prognosticated from a supine Decubiture. But if, exclusive of these Cases, the Patient lies in a supine Posture, with his Legs and Arms extended, it is a bad Sign: And it is the same according to *Hippocrates in Prognostic.* if the Legs in this Posture are very much retracted, or drawn in, or, on the contrary, much distended or thrown abroad; for we are taught by *Galen*, that they signify a Delirium: "But if, says *Hippocrates*, the Patient, moreover, lie in a Posture of Proclivity, and slide " downwards insensibly towards the Feet, the Danger is the " greater." We may justly pronounce such a Decubiture fatal; but still the worst Decubiture of all is, when the Body lies on the Back like a projected Carcase, with all its Members prostrate, and the Head reflected on the Pillow; or when, the Chin being elevated, all the Fore-part of the Neck appears eminent; or if the Chin is contiguous to the Clavicles; these are Signs that Death is just at hand: For the Soul having lost its Power, the Body lies like a dead Weight on the Back, with the Arms and Legs projected, rolling down insensibly towards the Feet, and the Head either falling back towards the hinder Parts with the Chin and Throat erected, or in a nodding Posture resting on the Clavicles. Such a Decubiture signifies, that Death is very near. *Galen, de Humoribus, Lib. 1. Text. 24.* speaks of this Decubiture when he says, "You must know " that we call it a *Dejection* when the Patient is incapable of " lying like a living Person, but is carry'd downwards like a " dead and inanimate Carcase." When the Body in the Decubiture slides down towards the Feet, it is, in the Judgment of *Hippocrates*, a Sign that the Strength is exhausted to an extreme Degree. To be incapable of standing, sitting, or rising, is certainly a more tolerable State; but to lie along in the Manner of a dead Body, universally deprived of all Strength in every Part, is what the same Author, *Com. 1. in 6 Epid.*

*Text. 33. Cap. 4.* informs us, ἐπιπείθαι, "to be precipitated," to be utterly cast down, or in a State of utmost Dejection. This *Decubitus ad pedes*, "Decubiture towards the Feet," is by *Galen, de Motu Musc. Lib. 3.* demonstrated to be of the utmost Fatality, from the Example of Carcases; for if you incline a dead Body any Way, it will not rest a Moment, but will immediately fall either prone or supine, as its Gravity directs it.

To lie with the Mouth gaping, is a no less fatal Prognostic, as we are assur'd by *Hippocrates, in Prognost.* where he says, "If the Patient sleep with his Mouth gaping, it is a " mortal Sign." The Author of the *Coac. Præfag. 497.* expresses this Prognostic after a different Manner: "It is " fatal, he says, to lie on the Back, and sleep continually " with the Mouth gaping, and the Legs much incurvated " and complicated." The Gaping of the Mouth is caused either by the Weakness of the Faculty, which moves the lower Jaw, or a violent Æstuation at the Heart, or both these Causes united, or from a particular Resolution of the Muscles, which serve to pull up the lower Jaw to the superior. *Galen* says, that the Gaping of the Mouth without Sleeping has a much more fatal Signification; and, *de Mot. Musc. Lib. 7. Cap. 4.* he writes, "that to lie on " the Back with the Mouth gaping, is a Sign either of a " Stertor, a Resolution, Drunkenness, or Laziness." It is of as bad a Prognostication for a Person in a Delirium, or out of a Delirium, which is known by the Speech, to roll himself towards the Margin of the Bed, and first to shoot out his Feet, then to rise up in Bed, to erect his Body, and; if not prevented, to fall off the Bed, or rise. Under this obscure Delirium, attended with the before-mention'd Sign *Hollerius, in Coac. Præfag.* says he never knew one Person recover. We add out of *Hippocrates, Prognost.* that for a Person under an acute Distemper to desire to sit upright, is a bad Sign, but worse under a Peripneumony or Pleurisy. The Words of *Hippocrates* are these: "In every acute Disorder, " says he, if the Patient desires to sit up in the Height of the " Distemper, it is a bad Sign, but worst in a Peripneumony." Those who are afflicted with a Peripneumony, says *Galen, in Comment.* are sensible of a great Oppression of the Thorax while they lie in a supine Posture, but breathe more freely when they sit up; for when they lie on their Backs, Part of the Thorax rests on the Spine, by which means the Lungs are straighten'd, and debar'd from receiving the Air they want, by Inspiration. In other Diseases, during the Height of the Disorder (which Limitation is principally to be regarded) it is a very bad Prognostic when the Sick desire to sit up: For, while they are labouring under the Violence of the Distemper, they desire to lie without Motion; and, if any one endeavours to rouse them, they fight and resist: We may, therefore, well suppose, that when the Patient, in such a State, desires to sit up, it must be on account of an extraordinary Difficulty of Respiration, or Restlessness, or Delirium. Another Decubiture, like this, is described by *Hippocrates, in Prognost.* in the following manner: "If the Patient lies with his Feet " bare, but not very hot, and throws about his Arms, " Neck, and Legs, at random, it is a bad Sign; for it " signifies a Restlessness." In those indeed, who are of a soft and delicate Constitution, these Signs afford no certain Prognostic; for the slightest feverish Disorder disposes them to such a Decubiture; but, in others, it is owing either to some Disorder in the Mouth of the Stomach, or a great Weakness. In the *Coac. Præfag. 497.* this Decubiture is thus expell'd: "If the Patient lies with his Hands and Feet bare, and is " not molested with any vehement Heat, but throw his " Legs abroad, it is a bad Sign; for it shews an Anxiety." In the last place, *Hippocrates, in Prognost.* condemns a Decubiture on the Belly; in such as are not accustomed to sleep in that Posture, as signifying either a Delirium, or a Pain somewhere about the Region of the Belly. *Prosper Alpinus de præfagienda Vita & Morte.*

DECURSUS, ἀποσπῆσις, generally signifies the Duration of any thing, as of Time, or a Disease. *Castellus.*

DECURTATUS, (Pulsus) μείνους, or μωμενίζων, corruptly μύνους, is a kind of weak and deficient Pulse, which is perpetually diminish'd, till it wholly fails; but, if it returns, and increases anew, it is call'd *Decurtatus reciprocus*, μείνους παλιν-σπαύων. *Galen, de Diff. Puls. Lib. 1. Cap. 11.* If it be unequal, as well as deficient, it is call'd *Deficiens inæqualis*, μείνους ἀνὸ-μαλός. *Idem de Caus. Puls.*

DECUSSORIUM. A Surgeon's Instrument, which, by gently pressing on the *Dura Mater*, causes an Evacuation of the Pus collected between the Cranium and the before-mention'd Membrane, thro' the Perforation made by the Trepan. *Blancard.*

See a Figure of this Instrument in *Paré, L. 6. C. 21.*

DEFECTIO ANIMI. The same as *Syncope*, or *Lipothymia*, Fainting.



# DEF

**DEFENSATIVUM EMPLASTRUM.** A defensive Plaster.

**DEFENSIVUM.** An Epithet for some surgical Topics, which, apply'd to the Part affected, repel; or intercept the Humours, when laid upon a Part adjacent to that affected. *Defensiva*, in *Paracelsus*, signifies Cordials; exhibited internally. *Castellus*.

**DEFERENTIA VASA** are two white solid flattened Tubes, one lying on the Right Side, the other on the Left; from the Epididymis of which they are Continuations: Each of them runs up, in the cellular Vagina of the spermatic Vessels, as high as the Openings in the abdominal Muscles; the Blood-vessels lying forward, and the Vas Deferens behind them.

This Fasciculus, thus form'd by the Blood-vessels, Vas Deferens, and their common Covering, is term'd the spermatic Cord. The Covering is smoother on the outer than on the inner Side, and, for that Reason, it has been look'd upon as a Vagina; the internal Substance, which is more cellular than the external, connects all the Vessels together, while the external forms a Covering to invest them.

The Vas Deferens, having reach'd the membranous Lamina of the Peritonæum, where that Lamina runs over the Orifice of the Vagina, separates from the Blood-vessels, and runs backward, in form of an Arch, in the cellular Substance of the Peritonæum, as far as the nearest Side of the Bladder.

It passes afterwards behind the Body of the Bladder, to which it adheres very closely; as also to the Lamina of the Peritonæum, which covers it; and then continues its arch'd Course towards the Neck of the Bladder, where both Vasa Deferentia meet, and their Arches terminate.

In this Course the Vas Deferens passes behind, and crosses the neighbouring umbilical Artery, crosses the Extremity of the Ureter of the same Side; in its Passage, between that Extremity and the Bladder, and, having got behind the Bladder, it meets the Vas Deferens of the other Side, between the Insertions of the Ureters, and they run down together to the Neck of the Bladder.

This Canal, which, at the Origin of the Epididymis, is pretty large and plaited, becomes immediately afterwards smaller and smoother, and continues in that Form, till it gets behind the Bladder, where it begins again to be larger, and more uneven.

It arises from the angular Portion, or posterior Extremity, of the Epididymis; and from thence runs forward, in a very oblique Course, on the posterior Half of the Epididymis; where it is a little incurvated, as it joins the back Side of the spermatic Vessels.

The Texture of the smooth Portion of this Canal is very solid, and in a manner cartilaginous, especially near the Surface of its Cavity; which, tho' very narrow, is still kept open by means of the Solidity and Thickness of its Sides.

The Cavity of the Vas Deferens is cylindrical, tho' the whole Tube is flat, and its external Circumference oval, as may be seen by cutting it transversely; and the Cavity enlarges, as it passes behind the Bladder.

The Passage of the Vasa Deferentia, into the Vesiculæ Seminales, is very particular. These Canals are incurvated behind the Bladder, and their contracted Extremities unite at that Place. They unite in an Angle, and run between the contiguous Extremities of the Vesiculæ; and this Union is so close, that the adhering Portions seem to form only one middle Septum, between two small Tubes, each of which is form'd partly by the Extremity of one Vas Deferens, and partly by that of the neighbouring Vesicula.

This lateral Union of the Extremities of the Vas Deferens, and Vesicula Seminalis, on each Side, forms likewise a kind of short Septum, which terminates in a Crescent, like a small semilunar Valve; and the Extremity of the Vas Deferens is narrower than that of the Vesicula. By this Mechanism the Fluid, contain'd in each Vas Deferens, has Liberty to enter the contiguous Vesicula; but that contain'd in the Vesicula cannot return into the other Canal.

If we blow into one of the Vasa Deferentia, after having compress'd the Urethra, the Air inflates the contiguous Vesicula Seminalis, and the Bladder of Urine, without passing into the Vesicula, or Canal, of the other Side; except we blow with too great Violence.

Afterwards the two small Tubes, form'd each by the Extremities of the Vas Deferens and Vesicula, run in between the Basis of the Prostate, and Canal of the Urethra; and, perforating the Sides of that Canal obliquely, they terminate in the Caruncle. See **GENERATIO**.

**DEFIXUS.** Impotent, with respect to Venereal Enjoyments.

**DEFUVIUM Capillorum.** A Falling-off of the Hair.

**DEFUXIO.** A Defluxion. It is defin'd a Falling of a Humour upon an inferior from a superior Part. See **CATARRHUS**.

**DEFUTUM.** Properly Must, boil'd to the Consumption of one Half, or, according to others, of one Third. See **DECOCTIO**, and **CARBENUM**.

# DEJ

**DEGLUTITIO,** Deglutition. See **PEPSIS**.

**DEGMOS,** *δρυμός*. A biting Pain at the Orifice of the Stomach, from *δένω*, to bite.

**DEHENE,** Blood. *Rulandus*.

**DEHENES,** Ink. *Rulandus*.

**DEHENEZ,** Roman Vitriol. *Rulandus*.

**DEJECTIO.** A Discharge of the Excrements by the Anus. A Stool. See **ALVUS**.

Among the several Circumstances, from which Life and Death are prognosticated, Stools are none of the least considerable; and, in handling this Subject, we shall first consider those, which are said to be good, and from which the Physician concludes the probable Safety and Recovery of the Patient. Whether the Nature of Stools in general be good or bad, may be discovered,

First, from their Degree of Concoction or Crudity.

Secondly, from the particular Times in which they appear.

Thirdly, from their Substance.

Fourthly, from the large or minute Quantity in which they are discharged.

Fifthly, from the Time during which they continue, or the Time when they cease.

Sixthly, from the Advantage with which they are attended, and the Ease and Freedom from Pain with which the Patient discharges them. And,

In the seventh and last Place, from the Train of good or bad Signs, from which Prognostics from Stools derive their Certainty.

But to return: Stools of the good and salutary Kind may indicate Health in two Manners; either with respect to their due Concoction, in which Case they indicate not only the due State of the Stomach and Intestines, but also of the adjacent Parts, such as the Liver and Spleen; for *Galen* determin'd, that those Stools denoted the laudable and salutary State of the Stomach and Intestines, which, according to *Hippocrates*, in Prognost. *were soft, of a due Consistence, discharged at the particular Time generally observ'd by Nature in a State of Health, and whose Quantity bears a due Proportion to that of the Aliments taken*: Another Manner, in which good Stools indicate Health, is with respect to the Defluxion of Humours from the Viscera into the Stomach and Intestines; for *Galen* affirms, that good Stools not only indicate the due and natural State of the Stomach and Intestines, but are also a Sign, that there is no Defluxion of Humours into these Parts from the Liver or Spleen; for, when there is a Defluxion of this kind, not only the Colour, which is the Sign of a due Concoction, but also the Consistence of the Stools, is vitiated. In both these Manners, Physicians form Prognostics from Stools; first, in Disorders of the Stomach and Intestines, the due and natural State of which, according to *Galen*, in the seventh Chapter of his first Book *de Crisibus*, is signified by Stools, which are soft, of a due Consistence, discharged at the Time generally observ'd by Nature in a State of Health, and in a Quantity bearing a due Proportion to that of the Aliments; and, as the same Author has added, laudable Stools ought to be of a brown Colour, and not very fetid. But the Stools, which want all or any of these Marks, are bad; such, for Instance, as are hard, rough, too thin, of too high a Colour, discharged in a Quantity too large, or too scanty, in proportion to the Aliments, of an unequal Consistence, fetid, frothy, or not evacuated at the Time observ'd by Nature in a State of Health. But, when Patients are about to recover, the Stools are changed from these Conditions to that laudable State, which we call Concoction. Hence *Hippocrates*, in his Prognostics, justly affirm'd, *that the Stools became of a thicker Consistence, when the Disease was about to be determined*. And, in the fourteenth Aphorism of his second Section, he asserts, *that, in Fluxes of the Belly, Changes of the Excrements are good, unless they change for the worse*. But we far more certainly and infallibly prognosticate the Events of Diseases by the Evacuation of those Humours, which fall upon the Intestines. The Disorders hence arising, *Hippocrates* calls Abscesses, Dysenteries, Tenesmi, Fluxes, Disturbances of the Belly. Concerning Patients labouring under these Indispositions, in the first Book of his Epidemics, he tells us, *that many had their Bellies disturb'd, but without any considerable Uneasiness, and in such a manner, as to create them no great Trouble*. And afterwards he tells us, *that some were, on the sixth Day, seized with the Jaundice; but that these were, in some measure, relieved by an increased Discharge of the Urine, and the Excrements*. With respect to Dysenteries, he afterwards uses these Words: *But such Patients, as were pretty far advanced in Years, were either seized with a Jaundice, Disturbances of the Belly, or a Dysentery, which was the Case of Bion, who lay sick in the House of Silenus; but that many others, whose Diseases were determined by a Crisis, were seized with a Dysentery, such as Xenophanes and Critias*. With respect to some, who recovered in the pestilential Constitution, he uses the following Words: *But, in this pestilential State, such as escaped, owed their Safety to these four Circumstances: Either there was a plentiful Discharge of Blood from their Nose; or a copious Evacuation of Urine, in which there was a large Quantity*



*Quantity of a laudable Sediment; or turbid and bilious Excrements were evacuated in the Beginning of the Disorder; or the Patients were seized with a Dysentery:* So that, in many Cases, Diseases may happen to be determin'd by Disturbances of the Belly, by Discharges of pituitous and bilious Excrements, and by Dysenteries. With respect to *Clazomenius, Hippocrates*, in the first Book of his Epidemics, uses the following Words: *On the thirtieth Day, a large Quantity of aqueous Excrements, like those generally evacuated in a Dysentery, were discharged.* With respect to the Patient in the Garden of *Deacles*, in the third Book of his Epidemics, Patient 3. he informs us, that, *on the fortieth Day, he went very frequently to Stool, voided a pituitous and white Matter, a profuse Sweat at the same time appearing over all his Body.* In the same Book of his Epidemics, Patient 9. he tells us of one *Heropytus*, that, *about the hundredth Day, he began to void many bilious Stools, which continued for a considerable Time, till at last he became dysenterical.* But we know, that these, and other Stools, are of the laudable and critical Kind, when, with the Signs of a manifest Concoction, they begin to appear on the critical Day; when the Disease is at its Height; or when they are liquid, of a yellow Saffron-colour, brown, livid, or blackish. But, in the Beginning of the Disease, such Stools, appearing without the Signs of Concoction, prognosticate the Death of the Patient; whereas, when they are attended with the Signs of Concoction, they prove critical and salutary. *Galen*, in his Comment upon the twenty-first Aphor. of Sect. 4. informs us, that, during a certain long Plague, he observ'd liquid Stools, which were first yellow, then brown, afterwards black, and, as it were, resembling the Faeces of Blood, not only in those who were on the Brink of Death, but also in those who were upon the Recovery. In these latter, he says, that such Stools followed after the Height of the Disease, and were so many Efforts of Nature to free herself from a superfluous Load; whereas, in such as died, those Stools appeared either in the Beginning, or Increase of the Disorder. The same Author, in his Comment upon the following Aphorism of the same Section, says as follows: "When, therefore, after the Concoction of the Disease, any peccant Humour is evacuated, then the Body is purged, as it were, by Nature; and for this Reason black Bile, and every other Humour of the like kind, portend a salutary Evacuation, when the Signs of Concoction appear in the Progress of the Disease. But, if any such Humour should be discharged without the Signs of Concoction, the Death of the Patient is thereby prognosticated. Humours, therefore, of any Colour, however prejudicial they should seem to be in that respect, nevertheless prognosticate a salutary Termination of Diseases, provided they are evacuated with the Signs of Concoction, in the Height of the Disease, and on the critical Day." This Doctrine *Galen* borrowed from *Hippocrates*, who, in the forty-seventh Aphorism of the fourth Section, tells us, that, *in Fevers which are not of the intermitting kind, spitting or vomiting Matter, which is either livid, bloody, fetid, or bilious, is a bad Sign; but that, if such a Matter is duly evacuated, either by Stool or Urine, it is a good Sign.* The Author of the *CoacæPrænotiones* 183. tells us, that those, who, labouring under a Coma, become deaf, have a Discharge of brown Excrements about the Crisis, by which they are relieved. Physicians are also enabled to form Prognostics from the Quantity of the Stools, and the Time during which they continue. *Hippocrates* therefore, in the first Book of his Epidemics, writes, that many were affected with Dysenteries and disturbed Bellies, by which their Disorders were critically determined. Thus, concerning *Heropytus*, in Epidem. L. 3. whose Disorder was determin'd in a salutary Manner, *Hippocrates* observes, that, about the hundredth Day, he began to have many bilious Stools; that they continued in the manner of a Dysentery for a considerable Time, and were accompanied with a Pain, by which means all his other Symptoms were alleviated. Besides, I myself have known several Patients, who have been preserv'd by bilious, porraceous, and saffron-colour'd Stools, together with a Discharge of well-concocted Urine, made by little and little, and continued for a considerable Number of Days. Stools of this kind, in Diseases which are to terminate well, and those, in which no fatal Signs appear, are, for the most part, accompanied with a salutary Hæmorrhage, copious Sweats, or some other Sign of a like Nature. *Hippocrates*, in the second Aphorism of his first Section, lays down two Signs, by which a Physician may know when Stools prove a salutary and useful Evacuation, and when not; which are, when the Patients not only bear them with Ease, but are also relieved by them. Hence the best and most salutary Stools either put an entire Termination to Fevers, and their Symptoms, or at least alleviate and abate them. With respect to this Subject, *Hippocrates*, in the 28th Aphor. of Sect. 4. affirms, "That, in Fevers, an Evacuation of bilious Excrements is removed by a supervening Deafness, which, in its Turn, is removed by a Discharge of bilious Excrements." In the seventeenth Aphorism of the sixth Section, he informs us, that, *in an Ophthalmia, a supervening Looseness is a Circumstance of a lucky and salutary Nature.* In the forty-eighth Aphorism of L. II.

rism of the same Section, he affirms, that a *Dysentery*, seizing those who labour under Obstructions of the Spleen, is a good Circumstance. In the 29th Aphor. of Sect. 7. he also asserts, that a violent *Diarrhœa* happening to a Person afflicted with a *Leucoplegmatia*, removes the Disease. What has been already said, is sufficient for discovering and determining what Stools are of the good and salutary Kind.

But there are others of a fatal and pernicious Nature; and such as prognosticate the Death of the Patient. These are known either from their Substance, their Quantity, their Colour, their Smell, the Manner in which they are discharged, the Time of their Appearance, the Changes they undergo, the Signs, which either precede, accompany, or follow them, the Degrees of Ease with which they are evacuated, and the Advantages they procure to the Patient. Stools then of the bad Kind differ very conspicuously from each other with respect to their Substance, since some are hard, some rough, some liquid, some viscid, some aqueous, some pinguious, some frothy, some mix'd with a certain Ichor, some unmix'd, and some what we call of the colliquative Kind. With respect to Quantity, these Stools vary no less considerably, since they sometimes flow immoderately, and at other times in a smaller Quantity; sometimes cease, and at other times are totally suppressed. With respect to Colour, some are white, some bilious, some yellow, some of a Saffron-colour, some brown, some green, some porraceous, some livid, some bloody, some black, and some ting'd with various Colours. Stools also vary with respect to the Manner in which they are evacuated, since there is one Manner of Evacuation in a Lientery, another in a *Diarrhœa*, another in a *Dysentery*, and a fourth in a *Tenesmus*. Stools also differ with respect to the Time in which they appear, since some are discharg'd in the Beginning of the Disease, without any manifest Signs of Concoction, and others in the Increase of the Disease. With respect to the Alterations they undergo, they may be chang'd for the worse, either as to their Substance, their Quantity, their Colour, or their Smell. Such Stools as prognosticate Death, may also be discover'd from their preceding, concomitant, and subsequent bad Signs. And, lastly, with respect to the Ease with which Stools are voided, those are accounted bad, which are evacuated with Difficulty or Pain, which afford no Relief, or which render the Patient worse. That we may, therefore, be able to prognosticate from Stools with the greater Certainty, I judg'd it expedient accurately to inquire into these Differences, beginning with those Stools, which are hard or rough, soft or liquid. With respect to hard Stools, the Author of the *Prorrhetics*, in 1 *Prorr.* 41. uses these Words: "When the Belly is costive, if a small Quantity of black Excrements, as it were, like Goats Tricklings, are discharged, and if, at the same time, there is an Eruption of Blood from the Nostrils, this is a bad Sign." *Galen* affirms, that the *σπυγεῖσθαι*, or Excrements like Goats Tricklings, are produced by the Length of their Retention, and the excessive Heat of the Parts; and if these Excrements should be of a blackish Colour, they denote a Heat and Burning about the Centre of the Body, which is a Sign of a malignant Disease; and, if this Disease is violent, and accompanied with other bad Signs, these Excrements certainly prognosticate the Death of the Patient. Liquid Stools sometimes proceed from a moist Constitution, a State of Childhood, a wet State of the Weather, humid Aliments, or Crudities of the Stomach; or liquid Stools are produced, when moist Aliments are not conveyed from the Stomach through the Lacteals; or when some Substance, of a fluid Nature, falls from the Liver or Spleen into the Intestines; or when the Liver, or the Spleen, or the whole Body, is purged by the Liver. Among liquid Stools, *Hippocrates* pronounces those of the aqueous Kind bad; because, as *Galen* says, they are a Sign of Crudities. Stools of this Nature are perpetually bad, and prognosticate Death in violent and bilious Disorders, if, at the same time, a due Quantity of good and laudable Urine is not discharged; whereas, in milder and more benign Distempers, which are accompanied with no fatal Symptoms, they only denote a Superfluity of crude Humours, for the Correction and Alteration of which, Nature requires a long Time. But, as *Galen* informs us, pinguious Stools are discharged in acute Diseases, when the Fat is melted down by the intense Heat of the Parts; but, when these Stools are also viscid, they import, that not only the Fat, but also the solid Parts of the Animal, are colliquated. When this is the Case, Stools, which are pinguious, viscid, white, small in Quantity, and highly fetid, are discharged. But they may be distinguished from such as are discharged under these Appearances, in consequence of eating any particular Species of Aliments; for these latter are more copious, and not always white. And, according to *Galen*, a fetid Smell is a Sign of Colliquation. With respect to Stools of this Kind, *Hippocrates*, in his Prognostics, informs us, that such as are small in Quantity, glutinous, white, of a pale Saffron-colour, and smooth, are bad. These must perpetually, and in the very Nature of the thing, be bad; since a Wasting of the solid Parts of the Body, and a Colliquation of the Fat, are fatal Circumstances, which, in acute Disorders,



orders, indicate an intense Heat, and certain Death, if the Disease is very violent, or accompanied with bad Signs. But, in milder Diseases, these Stools, instead of the Death of the Patient, prognosticate the Protraction of the Disease. Thus, with respect to the Patient in the Garden of *Dealces*, *Hippocrates*, in the third Book of his *Epidemics*, informs us, *that, on the sixth Day, his Stools were black, pinguious, frothy, viscid, and fetid*; and the Disease of this Patient was only determin'd on the fortieth Day. But the Stools, in this Case, were not the Effects of a Colliquation of the solid Parts, but of the Fat, and of the superfluous putrified and viscid Humours. But such Stools as are produced by a Colliquation and Wasting of the Solids, are absolutely fatal, and are discharged pure and unmix'd. Thus, with respect to *Silenus*, *Hippocrates*, in the first Book of his *Epidemics*, informs us, *That, on the fifth Day, his Stools were sincere, bilious, smooth, and highly pinguious*. Sincere Stools are also justly to be condemn'd in acute Disorders; because, according to *Galen*, they indicate an intense internal Heat, by which the ichorous Parts of the Humours are exhausted and consumed. Thus the Author of the *Prorrhethics* justly asserted, *that such Stools as became pure and unmix'd, heighten'd the Disorder*; and, according to *Galen*, these render'd it worse. Such were those of *Silenus*, *Epidem. 1. Patient 2.* on the fifth Day; those of *Phylinus's* Wife, *Epidem. 1. Patient 4.* on the sixth; those of *Euryanctes's* Daughter, *Epidem. 3. Patient 6.* on the twelfth; those of *Hermoptolemus's* Wife, *Epidem. 7.* on the fifth; those of *Parus*, *Epidem. 3. Patient 1.* on the seventh; those of *Pythion*, *ibid. Patient 3.* and others, the Histories of whose Diseases are to be found in the *Epidemics* of *Hippocrates*.

Frothy Stools are in like manner condemn'd, because they either indicate an intense Heat, by which the Fæces contract a Froth, like that produced on a Fluid boiling in any Vessel; or some stultent Principle, mix'd with the Humours, and resembling that Foam of the Sea produced by tempestuous Winds. The former of these Stools are the Effects of a Heat, melting down the Body; whereas the latter are produced by an unequal Perturbation. Hence *Hippocrates*, 2 *Prorrheth.* justly pronounces highly frothy Stools bad, because they either denote a Colliquation, or an Inequality. But those are worst, which indicate an intense colliquating Heat; and this Species may be known from the acute Fever, and the intense Heat of the Excrements themselves, which are frothy and sincere. Thus, in the first Book of the *Prorrheth.* 21. we are told, *That, in bilious and unmix'd Stools, frothy Efflorescences are a bad Sign*. In the same Book, 50. 'tis asserted, *That Stools, becoming frothy and unmix'd, heighten the Disorder*; or, as *Galen* expresses himself, render it worse. In the same Book also, 53. frothy Stools are said to be bad in acute and bilious Disorders. In the *Coacæ Prænotiones*, 602. we are inform'd, *That, in acute Distempers, frothy and highly bilious Stools are bad*; and afterwards, 613. we are told, *That Stools, which become frothy and sincere, increase and heighten the Disease*. Those Stools also, which are render'd frothy by an Admixture of a stultent Principle, are bad; because they indicate a Cruelty in the Excrements.

Stools either immoderately large, or preternaturally small, in Quantity, are also to be condemn'd. The former impair the Strength, and weaken Nature. Thus, in his *Prognostics*, *Hippocrates* uses these Words: *But Stools, too often discharged, and in too large Quantities, endanger Faintings*. The Author of the *Coacæ Prænotiones*, 609. informs us, *That liquid Stools, discharged in large Quantities, and frequently, are bad, partly because they induce Watchings, and partly because they impair the Strength*. Thus also, in the fourth Aphorism of the fifth Section, we are told, *that "Convulsions, or a Hiccough, brought on by immoderate Purging, are bad."*

Stools discharged in too small a Quantity are also bad, both because they are insufficient for removing the Cause of the Disease, and because they indicate a Superfluity of Humours, which, in a violent Disorder, generally prove fatal; or because they import, that the vital Powers are insufficient to expel the noxious Humours, notwithstanding their Efforts for that Purpose. This Circumstance *Hippocrates* observed in the first pestilential Constitution; with respect to which, in the first Book of his *Epidemics*, he says, *"These Symptoms were succeeded by Stools, which were either greater than the Patients could bear, or too small to produce any happy Effects; for which Reason the former Symptoms immediately return'd, and were heighten'd."* Those Evacuations by Stool, which cease as soon as they are begun, are bad, and, in acute Disorders, fatal. Thus *Hippocrates*, in the first Book of his *Epidemics*, tells us, *That those Patients, whose Bodies were soluble, had the Misfortune to have their Evacuations by Stool suppress'd in a malignant Manner*: And, when enumerating those Symptoms, and Signs of burning Fevers, which, in the Beginning, prognosticate the Death of the Patient, he adds, *their Evacuations by Stool were stopt*: Hence it is by no means safe to suppress Diarrhoeas and Dysenteries, since, by

this means the noxious Humours are determin'd to other Parts, induce considerable Injuries, and, in acute Disorders, Death.

We know Stools of a bad Kind not only from their Quantity, but also from their Colour. The white, thin, the bilious, the yellow, the Saffron-colour'd, or those resembling the Yolks of Eggs, the red, the bloody, the aqueous, the green, the æruginous, the livid, the black, and those diversify'd with a Variety of Colours, are all bad in acute Disorders, unless critically discharged. White Stools are either the Effects of the Aliments taken, such as Bread alone, Milk, Ptisan, Lupins, Alica, Almonds, and other Substances; or, as *Galen* informs us, in 1. *Prorrh. Comment.* 13. and in 2. *Prognost. Comment.* 17. and 19. they are produced when the Bile is not convey'd to the Intestines, either on account of an Obstruction of the biliary Duct, as in those affected with the Jaundice; or in consequence of its not being secreted from the Mass of Blood, by the Glands of the Liver; or, lastly, white Stools are produced by a Colliquation of the soft and recent Fat. But Stools of this Kind are small in Quantity, viscid, and highly fetid; and all of them, except such as are white, in consequence of eating some sorts of Aliments, are highly condemn'd in acute Diseases, and more especially such as are white, in consequence of an inflam'd Brain. With respect to which, *Hippocrates*, in the first Book of his *Prorrhethics*, 13. uses the following Words: *"In phrenetic Patients white Stools are bad, as is plain from the Case of Archecrates."* And in the same Book, 53. we are told, *That, in acute and bilious Disorders, Stools which are white, frothy, and bilious, only on the Surface, are bad."* *Hippocrates*, in his *Coacæ Prænotiones*, 36. tells us, *"That those who are severely affected with the Jaundice, discharge white Stools, and die."* This happens on account of a Retention of the Bile in the Blood; whence an Inflammation of the Brain, or Liver, which is a fatal Circumstance; because the Congestion of Humours to these Viscera is productive of the worst of Consequences. We have already observed, that such Stools as are white, small in Quantity, viscid, and fetid, are equally bad; because, according to *Galen*, they import a malignant Colliquation. Those Stools also, which are yellow, bilious, acrid, Saffron-colour'd, or resembling the Yolk of an Egg, and such as are green, are bad, unless critically discharged. The Saffron-colour'd, however, the æruginous, and the green, are the worst; because they indicate a violent internal Heat. All bilious Stools, not critically discharged, are also bad; since, in acute Diseases, they prognosticate Death, and, in Disorders of a milder Nature, a Protraction of the Disease, Relapse, and uncommon Pain.

Thus *Hippocrates*, in the second Book of the *Coacæ Prænotiones*, 43. informs us, *That it is a bad Sign to have a Bitterness, and a biting Pain, produced by Bile, about the Mouth of the Stomach*; because this Circumstance denotes a Redundance of Bile, not only about the Mouth of the Stomach, but also in the Intestines. And *Hippocrates*, in the 47th Aphor. of Sect. 4. condemns all bilious Evacuations. Acrid Stools of this Kind, discharged in burning Fevers, approaching to a Dysentery, or Tenesmus, if these Disorders are as yet crude, are generally fatal; for I have, says *Prosper Alpinus*, observed them in many Patients, who all died, after having struggled for a long time under their Distemper. Last Year, says he, I had a mournful Instance of this Truth in my dear Wife *Guadagnina*, who, on the seventeenth Day, died of a burning Fever, attended with a bilious Diarrhoea, approaching to a Dysentery. This is beautifully observed by *Hippocrates*, in the first Book of his *Epidemics*, where we have these Words: *"They frequently discharged Stools, which were bilious, small in Quantity, sincere, and acrid."* And afterwards he informs us, *"That, in the Summer and Autumn, Lienteries, Dysenteries, Tenesmi, and Fluxes, raged; and that the Stools discharged were bilious, thin, acrid, frequent, crude, and, in some Patients, aqueous."* In the same Book he tells us, *"That all those Patients had Disturbances of the Belly, and Stools of the worst Kind."* And, a little after, he informs us, *"That the Diseases, with which they were afflicted, were Dysenteries, Tenesmi, Lienteries, and Fluxes."* Of this we have an Instance in the Daughter of *Eryanax*, with respect to whom *Hippocrates*, in the third Book of his *Epidemics*, says, *that "On the twelfth Day she discharged Stools, which were bilious, small in Quantity, sincere, thin, acrid, and frequent."*

*Hippocrates*, in his *Prognostics*, observes, that red and bloody Stools are not of less bad Prefage; for, says he, in *Prognost.* *"those which are aqueous, or white, or green, or highly red, or frothy, are all bad."* The Author of the *Prorrheth.* in Lib. 1. 2. affirms, *"That, in all Diseases, red Stools are bad."* Again, he condemns such as are highly red. And, in the *Coacæ Prænotiones*, 330. 611. 613. 632. we have the following Words: *"Highly red Stools are bad, especially when produced by a Fault of the Liver, as happens in Patients labouring under Disorders of that Organ."* But from these we except Stools of this Kind, which are critical, and relieve. Green and porraceous Stools are also highly bad, provided they are render'd



der'd so by the Violence of a Disease; because, according to *Galen*, in his first Book *de Crifibus*, Cap. 11. they indicate an æruginous Bile, and an intense Heat.

*Hippocrates*, in his *Prognostics*, and in the 47th *Aphor.* of *Secl.* 4. pronounces livid Stools fatal in continual Fevers; because, according to *Galen*, these denote an intense Cold, and, as it were, a Mortification of the inferior Parts. No less fatal than these are black Stools. According to *Galen*, in acute Diseases, black Stools either indicate a Redundance of black Bile, or a parch'd and torrid State of the Blood. With respect to black Stools, *Hippocrates*, in *Aphor.* 21. *Secl.* 4. tells us, that "black Stools, resembling black Blood, and discharged spontaneously, either with or without a Fever, are very bad."

*Galen*, in his Commentary on this Aphorism, asserts, that black Stools indicate a great Weakness of the Spleen and Liver, in which they also denote the Generation of a large Quantity of gross and melancholic Blood: For this Reason black Stools are, in acute Diseases, justly accounted fatal Prognostics, since Nature requires a long time to concoct and correct this Humour. *Galen*, in a pestilential Constitution, observed many Stools of this Kind, which were discharged not only by those who died, but also by those who recover'd; but, in the former, they appear'd either in the Beginning, or the Increase, of the Disease. When treating of good Stools, we have shewn, that black Stools are sometimes beneficial; tho' when they appear, whilst the Disease is crude, and before the Signs of a due Concoction, they never fail to prove fatal; for then, according to *Galen*, they indicate, that an irreparable Injury is done to the Viscera. According to *Hippocrates*, in the 23d *Aphor.* of his 4th *Section*, "If those who have been emaciated by acute or lingering Diseases, by Wounds, or any other Cause, discharge, by Stool, black Bile, resembling black Blood, they die next Day."

According to *Galen*, all Stools tinged with various Colours are also bad, because they indicate a Variety of Humours in the Body; to correct which Nature requires a long time, which she cannot possibly have in acute and violent Disorders, which quickly impair the Strength. *Hippocrates*, therefore, in his *Prognostics*, justly affirms, "That Stools tinged with different Colours, tho' the Patients might struggle for a long time with their Disease, yet never fail to prove fatal." And, in the 21st *Aphor.* of *Secl.* 4. he tells us, that they are the more fatal, the worse and more numerous the Colours, with which they are tinged, are. This was the Case of *Apollonius*, concerning whom *Hippocrates*, in the third Book of his *Epidemics*, says, "That he discharged Stools of various Colours and Qualities, such as black, virulent, pinguious, crude, and acrid, and at last resembling Milk."

Fetid Stools are also bad; because, according to *Galen*, they are a Sign of Putrefaction. Thus *Hippocrates*, in his *Prognostics*, and in the 47th *Aphor.* of *Secl.* 4. condemns all fetid Stools. But such as are very fetid, liquid, yellow, pinguious, and what we call colliquative, are observed to be so highly fatal in acute Fevers, that very few Patients, who discharge such Stools, have been found to recover; because they denote a predominant Putrefaction, and a Loss of Strength. They are also a highly fatal Sign in continued Fevers; and Stools of this Kind resemble the Yolk of an Egg, diluted in fat Broth; only with this Difference, that they are highly fetid. With respect to these, *Hippocrates*, in the 3d Book of his *Epidemics*, affirms, "That those who labour'd under either acute or chronic Diseases, were taken off principally by Stools of a bad Kind." And *Galen*, in his Comment on this Passage, uses the following Words: "That long-continued Plague, which appear'd in our own Age, cut off most of those who fell the Sacrifices of its Fury, in consequence of their Evacuations by Stool; for the Matter discharged was the Effect of Colliquation." Of this Kind were the Stools of the Concubine of *Nicolaus*, as *Hippocrates*, in the seventh Book of his *Epidemics*, informs us.

These are the various Kinds of Stools, which threaten Death, either with respect to their Substance, their Quantity, their Colour, or their Smell. Stools also discharged in a preternatural Manner, and such as are either continued too long, or evacuated without the Consciousness of the Patient, are fatal; because, according to *Galen*, in acute Diseases, they either prognosticate a Delirium, or a fatal Loss of Strength. With respect to this, the Author of the *Prorrh.* in the first Book, 78. uses these Words: "Thin Stools, discharged without the Consciousness of the Patient, if he is not delirious, are bad, as it sometimes happens in an hepatic Flux." In like manner, in continual Fevers, those Stools which continue too long, either with or without a gnawing Pain, such also as are copious, and afford no Relief, are highly bad. By these *Hippocrates*, in his *Epidemics*, tells us, that many were taken off: Thus, in the first Book, he uses these Words: "In the Summer and Autumn, Lienteries, Dysenteries, Tenesmi, and bilious Fluxes, rag'd; and the Stools discharged were thin, frequent,

crude, acrid, and in some aqueous." And, in the third Book, he tells us, "That, with respect to the Evacuations by Stool, many Patients were subjected to terrible Disorders, especially to a Tenesmus, which was principally incident to Children, and those who had not as yet arrived at Puberty, many of whom died lenteric." *Hippocrates* also, in the 43. *Aphor.* of *Secl.* 6. informs us, "That Persons, weaken'd by a long-continued Dysentery, unless they die of it, fall into a Lientery, or Dropsy, which proves fatal to them." All Stools, therefore, of this Kind, are fatal, if they appear at the Beginning of the Disease, without any Signs of a previous Concoction; at which time no Evacuations are good and laudable, but symptomatical and bad. Stools of this Kind *Hippocrates* had in his View, when, in the third Book of his *Epidemics*, he uses these Words: "Most had their Bellies disturb'd, and were seiz'd with Horrors and Sweats, which were not critical." With respect to Stools of this Kind, in *Hippocrates*, in *Epidem. Lib.* 3. we find these Words: "Two Brothers, the Companions of *Cecrops*, from the Beginning, discharg'd Stools which were black, feculent, in Colour resembling Aliments prepared of Blood, (καρκαδία) highly bilious, and frothy."

Bad Stools are also known from their preceding, their concomitant, and subsequent Signs, and from their being so far from determining the Fever, that they rather render the Patients worse. Thus *Hippocrates*, in the third Book of his *Epidemics*, says, "The Stools discharged did not alleviate the Symptoms." And, in the first Book of the *Prorrh.* 129. these Words occur: "In acute Diseases, after a moderate Eruption of Blood and black Stools, Deafness is bad." In the same Book, 81. we are told, "That, in burning Fevers, attended with some Degree of Shivering, and frequent Discharges of aqueous Bile by Stool, a Distortion of the Eyes is a bad Sign, whether the Patients are seiz'd with a Catalepsis or not." And, in the same Book, 108. we are told, "That sublivid Stools, accompanied with Perturbations of the Intestines, and a Discharge of thin and aqueous Humours, are bad." In the same Book, 127. after Eruptions of Blood, black Stools are said to be bad; such were these observed in *Silenus*, *Hermocrates*, the Daughter of *Eryanax*, the Youth lodged in the *Forum Mendacium*, the Woman at the House of *Panthimides*, another Woman who suffer'd Abortion, another Woman in the *Forum Mendacium*, *Parus*, *Pythion*, *Apollonius*, and many others, whose Histories occur in the Writings of *Hippocrates*; the best Source from which we can possibly learn to draw Prognostics from the Characteristics of Stools, whether of the good or bad Kind.

DEJECTORIA. Purging Medicines. See CATHARTICA.

DEINOSIS, δεινός, from δεινός, to exaggerate. It signifies strictly Exaggeration; but is by *Hippocrates*, in his *Treatise de Ratione Vitæ in Acutis*, applied to the *Supercilia*, where it imports their being enlarged and distended.

DEIPNON, δειπνόν. A Supper, properly; but it implies any Meal in general.

DEIRA, δειρά. The Neck. See CERVIX.

DELATIO. The same as INDICATIO. *Castellus* from *Mich. Gaveffetus*.

DELETERION, δηλητήριον, from δηρίον, to injure. I don't know, that the *Greeks* use this Word as an Epithet to any thing, except φάρμακον, having never met with it in any Gender, but the Neuter. It imports pernicious, injurious, or poisonous. *Galen* defines deleterious Medicines such as agree with no one, either in Sickness, or in Health.

DELIGATIO. The Application of Bandages.

That Bandages are very useful, and even necessary, for curing the Disorders of the human Body, is evident, not only from the Testimonies of *Hippocrates*, *Galen*, and other eminent Physicians; but also from this, that there can scarcely be any Operation, in Surgery, perform'd successfully without their Assistance: For, should a Surgeon perform an Operation with the greatest Judgment and Care, but miscarry in the Application of the Bandage, all his Endeavours would be to no Purpose; and more especially in the Treatment of Wounds, Punctures, Luxations, and Amputations. And we often find, that, in Fractures and Luxations, after a proper Reduction of the Parts, the Cure depends more on a skillful Application of the Bandage to the Part affected, than on the Medicines. And, in the Case of violent Hæmorrhages, a proper Application of the Bandage and Compresses proves the most effectual and speedy Remedy, as must be acknowledged by every one, who has any Skill in Surgery; not to mention, that the making and applying a Bandage, after a genteel and ready manner, is justly reckon'd among the good Qualifications of a Surgeon, as it gains him the Esteem of the Spectators, and the Confidence of his Patient, which is of great Influence in forwarding the Cure; for both one and the other judge of a Surgeon's other Abilities, by his Performance on such Occasions.

By



By a Bandage, we understand a Piece of Linen Cloth, of a Shape and Size suitable to the Part of the Body it is to be applied to: They are sometimes of a square Figure, not unlike a Napkin; but generally they are long and narrow, when design'd for Fractures, Luxations, and Wounds; or for retaining Compresses, Plaisters, Lint, or the like. The *French* make a Distinction betwixt a Band and Bandage: By the first, they understand the loose Cloth, before it be applied; and, by the other, the Band, when applied to the Body.

There are various Kinds of Bandages; some are peculiar to one, and others common to several Parts of the Body: Some, again, are simple, and others compound. Those are call'd simple, which are made of one entire Piece of Linen, without any other Pieces join'd to them. With respect to these, we are to observe, to make them of Linen, cut according to the Length of the whole Piece, and commonly three or four Fingers Breadth, suitable to the Part of the Body they are to be applied to. These simple Bandages may be roll'd up at one or both Ends, as the Surgeon shall think most proper or necessary.

There are four different Ways of applying the simple Bandage, which are distinguish'd by as many different Names.

1. The circular or annular Bandage is, when the upper Rounds come exactly over the undermost. 2. The obtuse or *Afcia*, in *French Dolours*; when the Rounds ascend or descend upon each other, in the Form of a Screw. 3. The Repent, in *French Rampant*; when the Bandage is applied to the Part affected in Rounds separate, and at a little Distance from each other. 4. Reflex, call'd by the *French Renversé*; when the Bandage must be inverted, and turn'd back, as in those applied to the Legs, or other Parts of the Body, of different Thicknesses.

Compound Bandages are made of several Pieces of Cloth, sew'd together, or of one Piece of Cloth, cut into more Heads than two, with more artificial Rounds than the former; and are commonly used in Fractures of the Jaw-bone, Clavicle, and Patella; such are those with four Heads, which are commonly call'd *Funda*. Some Figures of these Bandages may be seen *Tab. 23. d, e, f, g, h*. Add to this the Bandage of eighteen Heads, which some call *Afcialis*, which is used in compound Fractures, represented in *Tab. 30. Fig. 4. B, B.* and many others. Of compound Bandages, some are applied to the Breast, others to the Abdomen, and others again to the Arms and Legs; and from these different Parts they receive their respective Denominations. Some take their Names from the Things they resemble, as *Scapha, Stella, Stapes, Spica*; and others, again, have their Names from their principal Uses.

The Matter of which Bandages are generally composed, is Linen Cloth; the necessary Conditions of which are, first, that it be clean, partly for Decency, partly that it may not be offensive to the Wound; for, as *Galen* observes, a Surgeon ought to study Cleanliness and Neatness, as well as Usefulness, in his Dressings. Secondly, that it be not quite new, but wore for some time, which will render it more soft and smooth; for new Cloth, by its Hardness and Asperity, would irritate, inflame, and make the Parts itch; at the same time, it ought not to be wore thin, because that would make the Bandage too weak, and subject to break. Thirdly, it should be strong, consisting of Threads neither very coarse, nor very fine; since the first will make it uneasy to the Patient, and the other will render it liable to stretch. Fourthly, it should have no loose Threads, Knots, or Hems, nor any Seams, that can be avoided; but, if the Length of the Bandage should make Seams necessary, they should be as even, and as few, as possible. Fifthly, and lastly, as to the Length and Breadth required in a Bandage, that must be left to the Discretion of the Surgeon.

With respect to Bandages, it ought to be observ'd, that they be neither drawn too tight, nor too loose, but retain a moderate Tension; for, when they are too loose, they are of no Use in Fractures, or violent Hemorrhages; and, when too tight, they will create violent Pains, Tumors, and Inflammations, a Gangrene, and even a Mortification of the Part. We may easily judge whether the Bandage has a proper Tension, by trying to put our Fingers under it, by the Feeling of the Patient, and the Appearance of the Part affected. If the Patient does not complain of the least Swelling or Uneasiness, you may conclude the Bandage to be too slack; but, on the contrary, if the Part affected swells, and creates any great Uneasiness to the Patient, the Bandage, in that Case, must be too tight; or a Surgeon may easily discover, by the Swelling of the Parts nearest to the Bandage, whether he has observed a due Medium in applying it; for if the Extremities, especially those of the Arms or Feet, in the Morning, or at Night, are hard, turgid, and affected with an acute Pain, and if, at the same time, the Veins of these Parts are preternaturally turgid, you may conclude, that the Bandage is too tight; as, on the other hand, it must be too lax, if there be no Swelling, so that you can easily slip your Finger under it. If you are to apply a Bandage, with one Head, to the Hand or Foot, it is necessary to fix its Beginning with two or three circular Rounds, one above another, to prevent its slackening; but, if the Bandage be two-

headed, you must then apply the Middle of it first, and then roll the two Ends of it tight about the Limb with both your Hands; but, for the greater Security, the Extremities of the Bandage should be folded in, before they be fasten'd, in order to secure it the better. Bandages and Compresses for Fractures and Luxations ought never to be applied dry, but should be moisten'd with warm Vinegar, burnt Wine, or Oxycrate, which will make the Bandage adhere more closely, and will both strengthen the Parts, and alleviate, or prevent an Inflammation. Lastly, if the Parts under the Bandage itch excessively, as they often do, the Bandage may be a little relaxed; or, if that cannot be done with Safety, the Bandage and Dressing must be frequently moisten'd with the above-mention'd Liquors, till the Itching ceases. Whenever you renew a Dressing, great care must be taken not to pull it away too roughly or hastily, lest the Part affected be thereby greatly injured; for, if you use not the utmost Caution in taking off the Bandages, Compresses, and Pledgets, there will be Danger lest the Lips of the Wound, and the Fragments of the Bone, should, by such Precipitation, cause a dangerous Hemorrhage, and other bad Symptoms: And, for this Reason, whenever the Bandage adheres too closely to the Skin, being glued thereto by Blood, or other Matter dry'd, it is necessary to moisten it with Wine, or the warm Spirit of Wine, which will make it come off more easily. In like manner, you ought to take care to have all the Apparatus for a new Dressing ready and prepared, before you take off the old; lest the Part affected, by being long exposed to the Air or Cold, be thereby injured.

I have above hinted at some general Uses of Bandages; but, for a distinct Consideration of the same, it will not be amiss to specify some of their more particular Uses: And, first, they sometimes perform a Cure of themselves, and so supply the Place of Medicines, as in Fractures, Luxations, and violent Hemorrhages; and they are often applied to retain the Medicines, and other Dressings, on the affected Parts. Sometimes Bandages are used to repel Swellings of the Feet; and then they are call'd *Expellents*, and, by the *French*, *Expulsives*. The Manner of applying them, for this End, is, to begin at the lower End, and, by degrees, ascend with every Round. See *Tab. 24. Fig. 1. Let. F.* And these expulsive Bandages are not only used for swell'd Legs, but also to discharge the noxious Matter in Fistulas. Bandages are also of very great Use for restoring deform'd Parts to their natural State; and it is no uncommon thing to see Bandages, when applied to fresh Wounds, especially in the fore or hinder Parts of the Head and Abdomen, unite them surprisingly; and then the Bandage is commonly call'd *Uniting*. See *FASCIA*.

**DELIQUIUM.** This has two Significations in Medicine; for, first, it implies a Fainting, and is the same as *SYNCOPE*, which see. Secondly, it implies the Solution of any Body, when exposed in a cool and damp Place, by the Humidity it attracts spontaneously from the Air. Thus Salt of Tartar, dissolved in the manner above-mention'd, is called Oil of Tartar *per Deliquium*.

**DELIRIUM**, from *Deliro*, to rave, or talk idly; which is derived from *Lira*, a Ridge, or Furrow of Land. Hence *Deliro* properly imports, to deviate from the Right, that is, right Reason. We have no good Word in *English* to express *Delirium*, unless *Lighthheadedness* may be admitted.

As it is good for the Patient, under all Disorders of the Body, to have his Mind untouched, or to have all his Actions under the Command of the ruling Faculty, as at other times; so, on the contrary, to be in any manner delirious, or to be deprived, in whole or in part, of the Use of his Reason, is a bad Prognostic, and, in acute Diseases, often portends Death. For the Illustration of the Method of prognosticating from this Head, it will be necessary to shew, first, what we mean by a Depravation of Reason; secondly, by what Signs we distinguish the present, or predict any future Defect of this Kind; and, in the last Place, to treat somewhat largely of the different Kinds of Madness and Deliriums.

As to the first, *Galen* calls those destitute of Reason, or delirious, who neither speak or do any thing agreeable to Reason; but he seems not to have comprehended all delirious Persons under this Description, since not only those, who, in their Speeches and Action, are inconsistent with Reason, but such as, in any particular Affair, talk and act after an unusual and irrational Manner, tho' seemingly wise in many things, are to be reckoned among those who are mad, beside themselves, and delirious: For the great Founder of Medicine, *Hippocrates*, frequently discovered and judged a Delirium from a single deprav'd Action of the ruling Faculty: As, for Instance, *Aph. 6. Lib. 2.* from an Insensibility of Pain: "They who are affected with Pain in any Part of their Body, but are insensible of the same, are disorder'd in their Reason." And, in *Progn.* he passes the same Judgment from only the Decubiture: "To lie on the Belly," he says, "not being accustomed to it in Health, prognosticates Ill to the Patient; for it signifies a Delirium, or a Pain about the Region of the Belly." *Galen* himself, also, in 1. *Prorrh.* has told us, that a Delirium may



may be known merely by the Patient's Spitting; and, in *Prognost.* that it may be discover'd by the indecent Gesticulation of the Hands, picking of Motes, or fruitless Hunting of Flies. The Author also of the *Prorrhetic.* 1. says, "That a fierce Answer from a Patient of a mild Temper, or a mild Answer from one of a fierce Spirit, signifies a Delirium; as does also Garrulity in a Person of Taciturnity, and Silence in one much given to Talking." These and many other Examples prove, that a Person may be denominated delirious from the Depravation of one single Action. We conclude, therefore, that they are to be esteemed as labouring under a Disorder of Reason, who have some one of the voluntary Actions excessive or deficient, contrary to Reason, and all due Decorum; as when the Hand, for Example, is employ'd after a ridiculous manner in fruitless picking of Motes, or catching of Flies; or when any thing is done by the Patient contrary to Custom, and without a Cause, as when he talks much or little, contrary to his usual Custom, or talks obscenely, or utters his Words after an incoherent and broken Manner, or fetches his Breath slower than Necessity requires, or exposes his Pudenda to the Bystanders. We call those delirious, also, whose Mind, thro' some Defect of the Senses, is incapable of receiving Ideas, or is regardless of them when receiv'd; among whom are certainly to be reckon'd those who labour under some unusual Deficiency of the Senses without a Cause, or employ them in an unusual manner; as when the Patient is either depriv'd of some voluntary Action, or puts it to an ill Use. These Marks of a delirious Person seem to be very elegantly express'd in *Coac. Prasag.* 47. as follows: "To do any thing contrary to Custom, as to undertake or desire such things as never before entered into his Thoughts, or are contrary to his usual Inclination, is a very bad Symptom, and next in degree to Madness." Every Alteration, therefore, in Motions, Gestures, Voice, Speech, or the Judgment of the Senses, shews a Man to be delirious, and out of his right Mind.

We proceed, in the second Place, to treat in particular of the Signs which indicate a Delirium; where we shall desire the Reader to observe, what *Hippocrates*, as well as *Galen*, in various Places, have said on this Subject, particularly the former, 1. *Prorrhetic.* 44. where we are informed, "That a fierce Answer from a Person of a meek and composed Temper, or an unusual Meekness in one of a fierce and ungovernable Spirit, signify a Delirium." And, in the same Book, we are told, that a bold and fierce Aspect indicates a Phrensy; the same is also signify'd when the Patient is insensible of his Pain, or is free from Thirst when his Tongue is scorched with Heat, or is contented with small Draughts. Other Signs are, a Pulsation of the Hypochondria, and frequent Twitting of the Eyes, which *Galen*, on 1. *Prognost.* explains by staring and unsteady Eyes. A lying on the Belly, contrary to Custom, is accounted by *Hippocrates*, *Lib. Prognost.* a Sign of Deliriousness; and *Galen*, in *Comment.* tells us, that the same is signify'd by a supine Posture, with the Legs very much retracted, or spread, and an unusual Grinding of the Teeth, which is mention'd by *Hippocrates* in the Place before quoted; also when the Patient, under the Height of the Distemper, desires to sit up, it denotes a Delirium; and the same is indicated, as was before observ'd, by Gesticulation of the Hands, bringing the Hands to the Mouth, fruitless hunting of Flies, picking of Motes, pulling Threads out of the Clothes, or Straws out of the Wall, as *Hippocrates* observed in the Wife of *Deakes*, who lay sick in *Leium*. It is a most evident Sign of a Delirium, when modest Patients, especially of the Female Sex, for no Reason, expose the Pudenda without any Sense of Shame. *Hippocrates*, in *Prognost.* and *Galen*, in 2. *de Respirat. Cap.* 5. and on 3. *Epidem.* reckon a great and full Respiration, at Intervals, among the Marks of a Delirium; and, in *Coac. Prasag.* 282 we find a Palpitation of the Hypochondria, and the Patient's not knowing his familiar Acquaintance, to be Indications of the like Disorder. In *Coac. Prasag.* 99. 233. the Author mentions, among these Signs, a Trembling of the Tongue, or tremulous Voice, frequent Spitting, Emission of Urine, without remembering it, and very high-colour'd Urine, with an Enæorema. Whoever is versed in the Writings of *Hippocrates* and *Galen*, must observe also, that a Shrillness of the Voice, Roughness and Dryness of the Tongue, æruginous Vomiting, with a Deafness, Ringing in the Ears in acute Fevers, throbbing Pains about the Navel, unusual Pain of the Sides, profound Pain of the Hips, Urine with an elevated Enæorema, white aqueous Urine, with a round and elevated Enæorema, and a Pain of the Head in Patients who are restless, and afflicted with want of Sleep, indicate a Loss of Reason. The Author of the *Prorrhetic.* 1. 17. adds, "A Shrillness of the Voice, after much Loathing and Vomiting, with a dry Concretion in the Eyes, indicate Madness; as it happen'd to the Wife of *Hermozygus*, who, being seized with an acute and violent Delirium, died speechless." And, immediately after, these Words occur: "If, in burning Fevers, the Patients are seized with a Ringing of the Ears, a Dimness of Sight, and a Defluxion from the Nose, they become delirious." *Galen*, in his fifth Book *de Locis affectis*, tells us,

that, to phrenitic Patients, a Delirium does not happen instantaneously, but gradually; that it does not cease suddenly; and that it is preceded sometimes by Watchings, and sometimes by turbulent Sleeps, attended with strong Impressions of the Fancy in Dreams, during which some Patients cry out and start. Sometimes this Disorder is accompanied with a Forgetfulness so surprising and unaccountable, that the Patients, after they have taken up the Chamber-pot with a View to make Water, forget to do so. Some, on the other hand, who are naturally courteous and affable, make Answers to the Persons who address them, with a preternatural Kind of Disorder and Rashness. Another Circumstance, observable in Patients of this Kind, is, that they drink very sparingly. They have also a large, but slow Respiration. Sometimes the posterior Part of their Head is in Pain, and their Pulse is small and hard; but, when they approach nearer to a Phrenitis, their Eyes become highly squalid, and an acrid Tear stands in one of them. Lippitude ensues, and the Veins of the Eyes are observed full of Blood. Drops of Blood are also discharged from the Nose; at which time they are incapable of making rational and coherent Answers, pull the Knap off the Clothes, and pick at Straws: The Fever becomes more intense, more equal, more uniform, and less subject to Changes: The Tongue becomes rough, and the Patients sometimes become deaf, and sometimes melancholy: They can scarce make Answer to any Question propos'd, and are insensible of Pain. These Signs are sufficient for discovering when any Patient labours under a Delirium.

Many Circumstances prognosticate, that Patients will become delirious; such as Watching, for Instance, which often precedes a Delirium, as *Hippocrates* observes in his Book of *Prognostics*; and *Galen*, in his fourth Book *de Prasag. ex Pulsibus*, informs us, that both Watchings and a Delirium are the Results of an over-heated and over-dry'd Brain. Sleeps which are tumultuous and disturb'd, as also those unsound Slumbers, during which the Patient is, as it were, half awake, or cries out, and starts up, are the Forerunners of a future Delirium. Thus, in the *Coac. Prasag.* 83. we are told, "That turbulent and sudden Startings out of Sleep bring on a Delirium." The Author of the *Prorrhetics*, *Lib.* 1. 18. observes, that a Noise and Ringing of the Ears, as also Deafness, especially when attended with Urine, near the Surface of which Clouds are suspended, often precede Madness. *Galen*, in his fifth Book *de Locis affectis*, observes, that Forgetfulness often precedes a Phrenitis. An intense and uninterrupted Pain of the Head, in acute Fevers, also portends a Delirium, especially the Pain sometimes observed in the Ears, according to *Hippocrates*, in his Book of *Prognostics*. It also prognosticates a Phrenitis, when this Pain of the Head is accompanied with a Retraction of the Præcordia. Thus, in the *Coac. Prasag.* 119. we are told, "That, in acute Diseases, a Pain of the Head, accompanied with a Retraction of the Præcordia, if an Hæmorrhage does not happen, terminates in a Phrenitis." Watchings also, accompany'd with a Noise, and Ringing of the Ears, or with Deafness, prognosticate the same, unless an Hæmorrhage happens. In the first Book of the *Prorrhetics*, 38. the following Symptoms, appearing together, are said to prognosticate a Delirium: "Those Patients, afflicted with a Looseness, a Pain of the Head, Thirst, Watchings, Dimness of Sight, and Weakness, will, in all Probability, become delirious." The Author of the seventh Book of the *Epidemics* affirms, that a continued Pain of the Head prognosticates a Delirium; of which also a Pain of the Hypochondria is frequently the Forerunner; which Circumstance is there remarked in a Woman three Months gone with Child. A Palpitation of the Heart, and long-continued Pains about the Navel, in acute Diseases, prognosticate the same Disorder, as we are informed in the third Book of the *Epidemics*. From several Passages of the first Book of the *Prorrhetics*, we learn, "That this Disorder is prognosticated by a Pain in the ignoble Parts." And, in the same Book, we are informed, that repeated, but not continued, Pains of the Sides portend a Delirium. And, in the second Book, these Words occur: "If any Matter in the Urine rises to the Surface, if, at the same time, there is a latent Pain of the Hip, it prognosticates a Delirium, as does also a Ringing of the Ears;" which *Hippocrates*, in *Epidem. Lib.* 3. tells us happen'd to a bald Man at *Larissa*, who, having a sudden Pain in his Right Thigh, was forthwith seized with a Delirium. In the first Book of the *Prorrhetics*, 97. we are told, that, in pleuritic Patients, a Pain of the Side, vanishing, without sufficient Reason, prognosticates a Delirium. In the first Book of the *Prorrhetics*, 6. we are informed, that round Spits, and frequent Spitting without a Cause, indicate the same. *Hippocrates* also, in the fourth *Aphor.* of *Sec.* 5. asserts, that Blood, collected in the Breasts of Women, prognosticates Madness. *Galen* tells us, that Urine which is pellucid and white is bad, and generally portends a Delirium; as does also turbid Urine in acute Diseases, but more especially Urine with Clouds near its Surface, in Patients afflicted with turbulent Sleeps and Watchings. A Pulsation also under the Arm-pits, and in the Hypochondria, as also a large,



large, but slow, Respiration, denote the same, as we learn from the Book of *Prognostics*. And, in the *Prorrhetics*, Lib. 1. 11. the following Words occur: "In acute Diseases, when the Fauces are seized with Pain, become narrow, and perceive a Sense of Suffocation; and when the Patient, upon opening his Mouth, cannot easily shut it again; these Signs portend a Delirium, which proves fatal." Aeruginous Vomitings also, accompanied with continual Head-achs, Watchings, and Deafness, are infallible Signs of an approaching *Delirium*; since any one of them by itself, much more all, or some of them, appearing together in an acute Fever, are Signs of this Disorder.

Having thus enumerated the Signs of an approaching *Delirium*, we shall now consider the several Species and Differences of *Deliriums*, together with the respective Causes which produce them, since, without a perfect Knowledge of these, we cannot with Judgment prognosticate the Fate of delirious Patients. By a disorder'd Mind, then, we mean all the several Degrees of Aberration, Inconstancy, Hallucination, Madness, Privation of Judgment, *Delirium*, and *Phrenitis*; and Patients labouring under any of these, we call disorder'd in Mind. In these Disorders, the Powers of Reason and Imagination are principally affected; for, according to *Galen*, in his Book *de different. Symptom. Cap. 3.* the Imagination is either defective and slow in its Operations, as in a Coma and Lethargy; or it is totally destroy'd, as in that Species of Catalepsy call'd *Caros*; or, lastly, it is vitiated, and its Functions are deprav'd and unsteady, as in a *Delirium* and *Phrenitis*. Just so with respect to Reason, it is either defective, diminish'd, or, in some measure, destroy'd; this is by the *Greeks* call'd *Morosis*, and imports nearly the same with our *English* Word *Foolishness*; or Reason is entirely destroy'd, which is call'd *Madness*; or, lastly, it is vitiated, and its Operations corrupted, which is call'd a *Delirium*. In Conjunction with the Reason and Imagination, it also frequently happens, that the Memory is affected in the same different Degrees and Manners. In some Patients, whose Minds are disorder'd, the Imagination alone is affected, whilst the other mental Powers remain entire and untouch'd, as *Galen*, in his Book *de Symptom. different. Cap. 3.* observed in *Theophilus*. Sometimes, on the contrary, Reason alone is affected, whilst both Imagination and Memory remain sound, and in a due State; which, as *Galen*, in the last-quoted Book, informs us, happened to a phrenitic Patient. But, for the most part, both the Powers of Reason and Imagination are equally vitiated, as is observable in those delirious Patients, who either imagine such things as have no real Existence in Nature; or, on the contrary, imagine, that things actually existing do not exist; in consequence of which, both their Actions and Words are entirely inconsistent with Reason, and the natural Workings of a sound and well-regulated Fancy. All this formidable Train of Disorders are either divided into what we call Madness, Ecstasy, Folly, Aberration, Inconstancy, and Alienation of Mind; or into what the *Greeks* call *Paraphrenesis*, and the *Latins* *Delirium*; or, lastly, into a *Phrenitis*, which *Galen*, in Imitation of *Hippocrates*, distinguishes from all these other Disorders by this Circumstance, that it is the Concomitant of a Fever. When any of the above-mention'd Disorders happens with a Fever, it is call'd *Phrenitis*; and, without a Fever, *Mania*, or Madness, which is distinguished from a *Delirium* by the Perpetuity or Duration of the Disorder; for tho' a *Delirium*, or *Paraphrenesis*, happens with a Fever, yet it is not continual, as a *Phrenitis* is. *Galen* affirms, that, in several Passages, *Hippocrates* calls those Patients *phrenitic*, who are perpetually delirious; whereas he calls a *Paraphrenesis* that Species of *Delirium*, which only appears in the Height of the most acute Fevers, and gradually goes off as they decline. For this Reason phrenitic are distinguish'd from delirious Patients, by the Continuation of the *Delirium*, and its appearing gradually; except in those Patients who become delirious in consequence of an Inflammation of the Diaphragm; for *Deliriums* of this Kind are not easily distinguished from a *Phrenitis*, because they both happen with a Fever, and last as long as it; from which Circumstance the Antients imagin'd, that Persons became phrenitic in consequence of an Inflammation of the Diaphragm; and, for that Reason, call'd this Part *Phrenes*, φρένας, as tho' it were assistant τῷ φρενῶντι, "to the intelligent Part." *Galen*, however, makes a Distinction between this kind of delirious Persons, and those who are in a *Phrensy*; for these latter have a great and full Respiration, and at long Intervals; whereas in those who are under a *Delirium*, occasioned by the Diaphragm, Respiration is observed to be unequal, so as to be sometimes small and frequent, at other times to be great and straiten'd; which does not happen in a *Phrensy*, unless some Organ, subservient to Respiration, be affected with a Pain or Inflammation, as *Galen*, in his second Book of Respiration, has shewn with great Accuracy. Besides, in a *Delirium* proceeding from the Diaphragm, there is an immediate Tension of the Hypochondria, which happens later in the *Phrensy*; and this Tension of those Parts, in the Beginning, is a Symptom peculiar to that sort of *Delirium*; And, in short, among all the Symptoms attending a *Phrensy*, such as red and inflamed Eyes,

with a Face all over burning with Heat, and other Marks more fully described before, there are either none, or but few and inconsiderable, to be observed in that Disorder, proceeding from an Affection of the Diaphragm, which, besides, seizes the Patient, as it were, on a sudden, whereas the *Phrensy* comes on by degrees.

There are many other different Kinds of *Phrensy*; for there is one which is call'd the *μανικός*, "the *maniac*," in which the Patients kick, spurn, and bite, are in a furious Passion, and take all who come near them for Enemies; but, when they begin to be raging, fierce, and very mischievous, the Disorder is said to be vehement; and, in that State, is call'd by the *Greeks* *θνητός*, (from *θῆρ*, a wild Beast) and, by the *Latins*, *Ferina*. Of this Degree of *Phrensy* the Author of the first of the *Prorrhetics*, 26. and 123. speaks, when he says, "A *Delirium* which soon increases, and is exasperated into a Fierceness, is of the *ferine* Kind." There is also a mild and obscure sort of *Delirium*, under which the Patients can hardly be known to have their Reason affected. These, in *Coac. Prænot.* 65. are call'd silently delirious; and these low Kinds of mental Disorders are described in the 1. *Prorrhetics*, 34. as "tremulous, obscure, attended with Gropings of the Hands, but very phrenitical *Deliriums*;" the *Greeks* call them *ἀσάφης*, (obscure) and the *Latins* *obscuras*, which often escape the Notice not only of the Unskilful, but of Physicians themselves. The Patients, in such Cases, says *Galen*, in 1. *Prorrhet.* 33. are so far from making Exclamations, or endeavouring to leap out of Bed, that they lie very quiet, without Speech, or altering their Posture of Decubiture, but give Hopes to the Attendants of sleeping, if Silence were kept, for a little time. The Attendants, therefore, shutting the Windows, keep themselves quiet, sometimes for a long time together, imagining the Patient to be asleep, because he neither speaks nor moves; whereas he continues all the time waking, and gently moving his Hands, as if he were groping or searching about for something. Some, while they do this, have their Eyelids shut; and, if they are interrogated about any thing, open not their Eyes: Others, after they have opened them, soon shut them again, or hold them fixed in such a manner as *Galen* calls a *hætic Affection*. But this *Delirium*, by its Characters, agrees with what proceeds from a Coma, or Lethargy. We ought, therefore, carefully to observe the Alterations and Distinctions which occur in these Cases. A *Delirium* attending a Coma or Lethargy, and called by some *Greeks*, as *Galen* says, *Typhomania*, happens in the Beginning of the Distemper, and continues a long time; but the *ασάφης*, or obscure, *Delirium*, or, as *Galen* calls it, *hætic*, never happens in the Beginning, but in the Progress, of the Disease, after some vehement Madness. However, a lethargic or comatous *Delirium* may often be excited by a cold Humour, or even by a Redundance of Blood, after the Beginning of the Disease; and is sometimes antecedent and preparatory to a good or bad Crisis, being attended with a low, hard, straiten'd, and small Pulse, which Kind is not observ'd in the *Delirium* before-mention'd. But now let us treat of the Causes of a *Delirium*.

All *Deliria*, according to *Galen*, Lib. 2. *de Sympt. Caus.* proceed from hot and acrimonious Juices, but principally from yellow Bile, and frequently from a hot Distemperature of the Brain. As all Kinds of *Deliria*, Madness, and *Phrensy*, arise from some Disorder of the Brain, so particularly two Sorts of *Deliria*, I mean those which are excited in the very Height of acute Fevers, and those occasioned by hot and acrimonious Vapours ascending to the Brain. There are other *Deliria*, which, if without a Fever, the Physicians call *Mania*, or Madness; if attended with a Fever, *Galen* calls them *Phrenses*; though they are not true *Phrenses*, unless there be a Phlegmon in the Brain, or its Membranes. *Galen*, *de Caus. Sympt. Lib. 2. Cap. 7.* But this is a Case which rarely happens, and not so frequently as that phrenitic *Delirium*, which is excited by a Conflux of hot Humours to the Brain, or its Membranes, according to the Observation of *Hippocrates*, 2. *Epid.* And those *Deliria* may as well arise from Blood as Bile, in that Part of the Brain, which is the principal Seat of the animal Faculties, according to *Galen*, Lib. 2. *de Sympt. Caus. Cap. ult.* or they may proceed only from yellow Bile, which, torresc'd by the Heat of a burning Fever, is converted into black, and excites that vehement *Delirium*, which the *Greeks* call *Μανιόδεα*, *Θηριοδεα*, and are raging, furious, and wild, proceeding from an immoderate Dryness of the Brain and its Membranes, thro' adust Bile, by which the Patients are often thrown into Tremblings and Convulsions, which Symptoms, as *Galen* informs us, attend none but the most violent and pernicious *Phrenses*. Those *Deliriums* attending a Fever, which are call'd *phrenitic*, arise not only from hot Humours, but, as *Galen*, in Lib. 3. *Epid.* supposes, from Cold; as, for Instance, from pituitous Humours putrifying in the Brain, by which they contract a Heat and Acrimony very injurious to the Brain, and its Membranes, and productive of a *Delirium*. But these Kinds of *Deliria* are distinguished from those which are excited by hot Humours, by a Drowsiness or Sopor; for those who are delirious from a cold Humour sleep at the same



same time, or have some lethargic Affection; whereas, on the contrary, a *Delirium*, from hot Humours, subjects to want of Sleep. It often happens also, that a Mixture of hot and cold Humours produces a kind of *Delirium*, composed of a Phrensy and a Lethargy, as *Galen*, in 1. *Prorrh.* observes. And these two contrary Effects accompany the Disorder thro' its whole Course; for the Patient is sometimes afflicted with want of Sleep, at other times is oppressed with a Drowsiness, and is more or less phrenitic or lethargic, according to the Degree of mutual Predominance of the Bile and Phlegm over one another. These, then, are all the Causes of phrenitic *Deliria*; whence also a true Phrensy, which is excited by an Inflammation of the Brain and its Membranes, has its Original, and is mildest when from pale Bile, more violent from yellow Bile, and most violent when proceeding from the same Humour, rendered adust by a febrile Heat. That obscure *Delirium*, called by the *Greeks* ἀσάφεια, (*Asaphia*) which is attended by Silence, is owing to an extraordinary Languishment of the animal Faculty, and, as *Galen*, in *Prorrheticis*, calls it, a hectic Sort of Temperature; and is known principally by a very low, small, and hard Pulse.

This is *Galen's* Way of explaining the Causes of a *Delirium*; but, for a more rational Account, see *FEBRIS*.

#### Of salutary PROGNOSTICS from DELIRIOUSNESS.

A *Delirium* is least to be dreaded when it holds the Patient but a short time, and is attended with good, or, at least, not fatal Signs. The Strength also ought to bear some Proportion, that is, to have a good Degree of Firmness, since a *Delirium* requires an extraordinary Measure of Strength, and can hardly be subdu'd by Nature without it. No *Delirium*, as *Galen*, in 6. *Aph.* 53. teaches, is without Danger: "The most favourable is what is attended with Laughter; the most dangerous is the rash and fool-hardy; of a middle Nature between both is that which is accompany'd with Meditation." But no *Delirium*, tho' it be one of the greatest of Evils, is, in itself, a certain Prognostic of Death, no more than Soundness of Mind is a sure Sign of Recovery. However, a *Delirium*, attended with good Signs, is the less to be feared, and especially if it be not continual, nor violent and outrageous, but rather slight and inconsiderable, as when the Patient's Reason fails him but in few Particulars; for *Galen*, *Lib. de Diff. Sympt. Cap. 4.* calls it a great *Delirium*, when various Species of *Deliria* are observed together in the same Patient. A small and slight *Delirium*, which discovers itself only in a few Actions, is least of all to be dreaded, and especially if it comes only by Fits. But, in order to denominate a *Delirium* of the mild and favourable Kind, it is not enough, that it be not continual, but it ought to be void of all Ferocity, since the Author of *Prorrh.* 1. says, "That *Deliria* which increase in a short time to a Degree of Ferocity, end in excessive Raving." Of the Patients in such Cases *Galen* thus pronounces: "When you see a Person delirious to a Degree of Ferocity, tho' soon after he appears calm and composed, know for certain, that his Reason is not injured on account of the Fever, but that there is some growing latent phrenitic Affection, which will at length break out into apparent Phrensy." We may conclude, then, that an intermittent *Delirium*, which is not vehement, but slight, gentle, and inconsiderable, and especially when it affects a Person only by Fits, can by no means be accounted a fatal Prognostic. But Caution is here necessary, that we impose not on ourselves, in taking a *Delirium* for slight and gentle; for many have been thought in a *Delirium* of this favourable Sort when very near their End; for, as we read, *Prorrh.* 34. "Deliria which are tremulous, obscure, and attended with Gropings of the Hands, are phrenitic in a high Degree." But such Cases are easily distinguished from the Lowness of the Strength, the continual Duration of the Disorder, and other destructive Signs; for, in a mild *Delirium*, the Strength is very firm, the Disorder not continual, and none of those fatal Signs appear. Of this Nature was the Case of *Milidia*, in *Hippocrates*. But in the other *Delirium*, before described, the Pulse is low, the Disorder continual, and the Signs portend Destruction. All Signs, therefore, both those which commence with the *Delirium*, and those which appear afterwards, are very carefully to be observed; for they frequently precede a salutary Crisis, and take their Rise, as *Galen* supposes, *Lib. 1. ad Glau.* *Cap. 15.* from a critical Recurrence of the Blood and bilious Humour to the Head. Now a *Delirium*, which portends a Crisis, is sometimes attended with a Pain of the Head, a Heaviness, Deafness, and many other Symptoms of the like Kind; with respect to which, *Galen*, in 1. *Epid.* commenting on the Case of a Patient who lay sick in the Garden of *Dealees*, says, "That a *Delirium* on the ninth Day, with a Distortion of the Right Eye, are to be reckoned among Symptoms usually happening towards a Crisis." And, in the Case of the Virgin of *Abdera*, *Lib. 3. Epid. Stat. pest. Agr. 7.* a *Delirium*, with Deafness, preceded a Crisis, which was attended with Pains of the Feet, and an Hæmorrhage from the Nose. And we have a much fuller Description, to this Purpose, in the Case of the morose Woman of *Thasus*,

*ibid. Agr. 11.* "The third Day, it is said, the Convulsions ceased, and were succeeded by a Coma and Drowsiness, from which she awaked, grew restless, and highly delirious; and had an acute Fever; the same Night a copious and hot Sweat broke out over all her Body; the Fever left her; she slept, and had the free Use of her Reason." A *Delirium* also, observ'd on the sixth Day, in the Virgin of *Larissa*, *ibid. Agr. 12.* was the Sign of an approaching Hæmorrhage; which was also the Case of *Heropythus* of *Abdera*, *ibid. Agr. 9.* A *Delirium*, therefore, attended with Pain and Heaviness of the Head, want of Sleep, a Coma, Deafness, Dimness of Sight, a Splendor of the Eyes, involuntary Tears, Ringing in the Ears, Loss of Understanding or Memory, Trembling, Anxiety, Restlessness, Crying out, Starting up, Difficulty of Breathing, Suppression of Urine, vehement Rigor, much Æstuation, and intolerable Thirst, or any of these surprising the Patient on a sudden, is often the Forerunner of a Crisis, or an Hæmorrhage. As to an Hæmorrhage, the Author of *Coac. Prænot.* 184. says, "That, in Diseases where an Anxiety is suddenly succeeded by a *Delirium*, it portends a Flux of Blood, or of Urine." Of this last *Hippocrates*, 6. *Epid. Sect. 6. Text. 22.* pronounces, "That Urine, with a copious Sediment, gives a Solution to a *Delirium*, as in the Case of *Dexippus*." The same is effected by Sweat, according to *Galen*, *Lib. 3. de Crisibus*: "A Phrensy has its critical Solution, by a copious Eruption of Sweat; and especially if it flow plentifully, and hot, from the Head, the rest of the Body being, at the same time, in a Sweat." And, a little after, he says, "Sometimes it happens, that a Phrensy is critically terminated by an Hæmorrhage from the Nose." In *Coac. Præfag.* 483. we are told, that a *Delirium* terminates in Sweat and Sleep; and *Hippocrates*, *Sect. 7. Aph. 5.* has said, "That, in the Case of Madness, the Access of a Dysentery, Anasarca, or violent Commotion of Mind, is a good Sign." A *Delirium* then, as it is succeeded by some beneficial Evacuation, is a Prognostic of Health, and a kind of critical Sign; but it will prove of very bad Consequence when preceding an Evacuation of a pernicious Kind, such as Dropping of Blood from the Nose, cold Sweats of the Head, and the like. Our Inquiry, therefore, must be, whether the Evacuations be good or bad; which may, no doubt, be known by a Multitude of Signs, particularly from their Quantity, Quality, Place by which they are discharged, the Time of the Disease, or Days in which they appear, and by the Alleviation of the Disease. They are observed to be beneficial, if sufficiently copious in proportion to the Quantity of peccant Humours; if they are of the Quality of those which require to be evacuated; are discharged by a convenient Passage, and in a proper Season, that is, in the Height of the Disease, or on some critical Day; and are succeeded by an Alleviation of the Disease, and its Symptoms, or a total Delivery of the Patient from them. But there are three things of great Moment, which are principally to be regarded in all Predictions; and these are, the Pulse, Respiration, and the Appetite to Food; which, if they continue firm and orderly, tho' joined with some pernicious Sign, afford a very good Foundation for predicting the Patient's Recovery. This appears to be the Opinion of *Galen*, who, in his third Comment on the third of the *Epidemics*, *Text. 89.* treating of the Case of *Heropythus*, says, "That a *Delirium*, attended with a strong Pulse, and a due and orderly Respiration and Appetite, are undoubted Signs of Strength of Nature sufficient to support the Patient during the Course of the Distemper."

From the Premises it appears what Judgment we are to pass upon the Disease from Signs accompanying a *Delirium*: We are now to inquire what is to be prognosticated from those Symptoms, which are consequent to a *Delirium*, and shew, in some measure, the Nature and Quality of it. Those Evacuations, then, before-mention'd, are salutary; as copious Hæmorrhages from the Nose, of which *Galen* treats, *Lib. 3. de Crisibus, Cap. 8.* Also menstrual Purgations, attending and consequent upon a *Delirium*; such as were observ'd by *Hippocrates*, in the Virgin of *Larissa*, *Lib. 3. Epid. Stat. pest. Agr. 12.* and in the morose Woman, *ibid. Agr. 11.* and were attended with a plentiful Sweat, in consequence of which the Woman was freed from her Fever, slept, and recover'd the entire Use of her Reason. Hæmorrhoids also, consequent upon a *Delirium*, prognosticate Recovery, according to *Hippocrates*, *Sect. 6. Aph. 21.* where he says, "That if those who are mad come to be affected with the Varices or Hæmorrhoids, they are freed from their Madness." Violent Pains in the Hips, Legs, Feet, and Hands, are of the same Signification, as shewing they are excited by an Expulsion of the Humours from the principal to the more ignoble Parts; which is a Crisis that Nature attempts by a Translocation of the Humours. To this Purpose *Hippocrates*, *Lib. 1. Epid. Sect. 3. Agr. 3.* in his Description of the Case of *Herophon*, says, "The eighth Day he was feverish, his Spleen subsided, he understood every thing, a Pain came first into his Groin on the same Side with the Spleen, from whence it shifted into both Legs." The same Pains, in the Wife of *Epicrates*, *ibid. Agr.*



*Ægr.* 5. were not the least Part of the Crisis. The Patient also, who lay ill in the Garden of *Dealces*, *Lib. 3. Epid. Sect. 1. Ægr.* 3. on the fourteenth Day was quite delirious, on the fifteenth was seized with a Pain in his Knee and Legs, on the seventeenth had an Eruption of Sweat all over his Body, and was restored to his Reason: Thus also, in the Virgin of *Abdera*, *Lib. 3. Epid. Stat. pest. Ægr.* 7. Pains in the Feet, on the twentieth Day, put an End to her *Delirium* and Deafness. Sleep, to a sick Person under a *Delirium*, is always of great Moment, and especially if it subsides, or, at least, diminishes it, according to the second *Aphor.* of *Sect. 2.* which says, "That if Sleep puts an End to a *Delirium*, it is a good Sign." And there is good Reason for it, since a *Delirium* is always attended with want of Sleep, and both proceed from the same Cause: If, therefore, Sleep happens upon a *Delirium*, it is a Sign, that the Cause is removed. But then this Sleep is to be distinguished from a violent or preternatural Propensity to Sleep, as a Coma, Cataphora, or Lethargy; for, as Sleep is a good Sign, so any of the aforesaid soporiferous Affections is a bad one, except that comatous Affection which is excited by the Influx of the Blood into the Brain, in order to a future Crisis. Sleep, therefore, is always good after a *Delirium*, and especially if it be with Quietness, as *Hippocrates* observes in *Herophon*, the Wife of *Epicrates*, and in *Meton*, *Lib. 1. Epid. Sect. 3. Ægr.* 7. whose *Delirium* was resolved by Sleep. For a *Delirium*, therefore, to be composed by Sleep, is always good, as the contrary is bad; for, according to *Aph. 21. Sect. 2.* Sleep, oppressing instead of relieving the Patient, portends Death. Distinct Dreams, ἐνύπνια ἐναργῆ, are also a good Prognostic in a *Delirium*, and especially in a Phrensy, as we read in *Coac. Præfag.* 90. which, tho' it seems to be contrary to 1. *Prorrh.* 5. where it is said, that such Dreams shew a Phrensy, is yet very true; as will appear from the following Distinction, which will prevent all Mistakes in the Matter. Conspicuous Dreams, then, which are not turbulent, but quiet and serene, are, in *Coac.* of good Signification, because they can never be supposed, or are observed, to be clear and distinct, unless the Inflammation in the Brain, the febrile Heat, and the Motion excited in the Humours by the Vapours, are allay'd and appeas'd; which Effects are always reckon'd a good Prognostic; whereas conspicuous, but turbulent Dreams, by which the Patient is affrighted, and starts out of his Sleep, are not only owing to a Dryness, but indicate an Inflammation, a febrile Heat, and disorderly Motion of the Spirits; which give Reason to fear, that the *Delirium* will increase to the Degree of a Phrensy. But if the Question, in short, be, Whether a Mitigation, or a total Composition, of a *Delirium* be always a good Sign, we answer, that a *Delirium* mitigated, or totally compos'd, or resolv'd by Sleep, a Translation of the Humours to the Legs, Feet, or other ignoble Parts, or some critical Evacuation, gives always good Grounds for us to predict, with Confidence, the Patient's Recovery.

#### Of a DELIRIUM prognosticating Death.

A *Delirium*, which threatens Death, is known by its distinguishing Marks, the Time in which it appears, the extraordinary Weakness of the Patient, and other mortal Symptoms, which accompany or succeed it. Phrenitic *Deliria* are, for the most part, mortal, tho' all phrenitic Persons do not die. We call all those *Phrensies*, which the *Greeks* call *μανιώσεις, θηριώσεις, and ἀσάφειες*, "Maniac, raging in the manner of wild Beasts, and obscure or mopish;" and the *Latins*, *feroces, tumultuosas, furiosas, ferinas, melancholicas, atque obscuras seu blandas*; the five first of which express the two former *Greek* Words, and the two last the latter. The *Asaphodes, Asaphes, or Obscure*, are observed in the Beginning of the Disease, or after a Mania; and, proceeding, as we observed before, from Blood, or Bile, or a Mixture of Bile and Phlegm, or from putrid Phlegm, are reckon'd not so fatal; whereas a *Delirium* from Weakness, or a hectic Distemperature of the Brain, is the most mortal of all: Whence the Author of the *Prorrh.* calls those *Deliria* highly phrenitic, tho' before he had named them mild, obscure, and attended with groping, or fumbling with the Hand. A distinguishing Property of these latter is Silence; of which, in *Coac. Præfag.* 65. it is said, "That a high *Delirium*, attended with Silence, but not a Deprivation of Voice, is mortal." In phrenitic *Deliria* we may observe three Kinds of Silence; one in which the Patient speaks not at all, or but very little, tho' he is capable of speaking; the second is attended with a lethargic Affection, or an Extinction of the natural Heat; and the last with an Aphony, or Privation of Voice, thro' an Oppression, or almost Extinction, of the Animal Faculty, a Convulsion of the Organs of Speech, or an Interception of the Air which forms the Voice. A *Delirium*, attended with Silence, the Faculty of Speech remaining entire, a Fumbling with the Hands, a low Pulse, with the Eyes sometimes closed, as in Sleep, and sometimes half open, proceeds from the Weakness of the Faculty. Of these kinds of *Delirium*, besides what was quoted before from the *Prorrh.*, we find it thus pronounced, *Coac. Præfag.* 76.

"A *Delirium*, attended with Trembling and Groping, or Fumbling with the Hands, shews a Phrensy." And in the same Treatise, *Text.* 486. "A *Delirium*, attended with Silence, Restlessness, Rolling of the Eyes, and vehement Expiration, is of bad Presage." Of this sort *Galen*, on the *Prorrhetica*, speaks, where he says, "This Affection of the Humours is of a very depraved Kind, like that of hectic Fevers, which, when they begin to be form'd, can hardly be cured; but, after they are completely constituted, are incapable of a Solution." And these comatous Affections are the more formidable, when consequent upon a very severe and hot Distemper: Thus, if a Patient falls into a Lethargy, from a Refrigeration of the Brain, after an Inflammation, the Event is most fatal; for, as we are told by *Galen*, in his 3. *Comment.* on the *Prorrhetica*, a cold, succeeding a hot Distemper, is reckon'd incurable. In a violent *Delirium*, or Mania, the Patient, both on account of the Malignity of the Humour, and the immoderate Dryness, becomes not only silent, but affected with an Aphony, or Deprivation of Voice; as it happen'd to the Wife of *Hermozygus*, who died highly delirious and mute, as we are inform'd 1. *Prorrh.* 17. The same Event, from the like Prognostics, beset the Man under a Phrensy, *Lib. 3. Epid. Ægr.* 4. and the Wife of *Dealces*, *ibid. Ægr.* 15. And *Galen*, *Com. 2. in Prorrh.* tells us, "That, under a Fever, a convulsive Aphony, ending in a *Delirium*, attended with Silence, is pernicious." Some Symptoms are supposed to be proper to the most violent *Deliria*; such as Tremblings, Convulsions, Droppings of Blood from the Nose, bright aqueous Urine, Gesticulations of the Hands, and the like. Tremblings and Convulsions attend not all phrenitic *Deliria*, but only the most violent; as, for Example, the serene or raving, as *Galen*, 1. *Com. in Prorrh.* *Text.* 9. remarks; and are the usual Consequence of fatal Emotions. Persons in a Phrensy are seiz'd first with a Trembling, and then die in Convulsions. The Author of 1. *Prorrh.* 9. says, "That violent Phrensies end in Tremblings." And a Trembling, as *Galen* says, succeeds only the most violent Phrensies; for phrenitic Persons are a long time afflicted with Infirmities of the Nerves, from the Dryness of the Disease. Now the Strength and Spirits being exhausted with Want of Sleep, and Variety of Motions, and the Nerves at the same time immoderately dried, the Patient is seiz'd with a Trembling, which indicates a vehement Dryness of the Nerves, from a Conflux of adust Bile to the Brain. This is observed by the Author of 1. *Prorrh.* 14. where he says, "That if those who are highly delirious, are seiz'd with Tremblings, it is bad." And, a little after, *Text.* 16. he tells us, "That phrenitic Persons, drinking little, and affected with the least Noise, are subject to a Trembling." And, *Text.* 19. he observes, "That a *Delirium*, attended with a Shriek of the Voice, and convulsive Tremblings of the Tongue, portends a high Phrensy: In this Case a Hardness and Asperity are pernicious." And *Galen*, on *Text.* 20. remarks, "That the Trembling of the Tongue, in such Patients, indicates a Weakness of the Faculty, and a phrenitic Disorder of Mind." Hence, in his *Comments* on the *Prorrhetica*, he calls them tremulous Phrensies, which proceed from the Faculty being almost extinct, and are observed to be attended with Silence; for three Symptoms are the usual Attendants of an increasing Phrensy; an ecstatic Silence, a Trembling under a very high Phrensy, and Convulsions at the Approach of Death. Mortal Tremblings succeed burning Fevers, or vehement Madness, from adust Bile, which we just now call'd *Ferinam & Melancholicam*: But Tremblings preceding or attending *Deliria*, tho' there are none of them good, excepting such as are critical, do not always portend Death; but are oftentimes, as well as Convulsions, removed by a supervening Fever. Tremblings, therefore, are only observed to be mortal, when coming upon a *Delirium* or Madness; and many, at the Beginning of a Distemper, are seiz'd with a Trembling, who do not die. Of this we have an Instance in *Pythio*, 3. *Epidem. Ægr.* 1. Nor are Tremblings fatal Prognostics in all *Deliria*, but only in violent ones, according to *Coac. Prænot.* 93. "In a violent Phrensy, supervening Tremblings are fatal;" and *Galen* justly observes, *Com. 1. in Prorrh.* that not all, but the most violent Phrensies terminate in Tremblings. However, these Tremblings are not, like Convulsions, inseparable from those in a Phrensy, since there are many phrenitic Persons, who are never affected with them; but they are consequent upon those vehement and furious Phrensies, in which the Strength is exhausted by much Waking and Motion, and the Nerves beyond measure dried and harden'd: Wherefore this sort of Trembling, as well as those fierce and outrageous Phrensies, which are the Cause of them, are seldom observed; whereas all phrenitic Patients are seiz'd with Convulsions before their Death, and all Convulsions, accessory to a *Delirium*, and excited by a Dryness of the nervous Parts, are mortal; so that we may safely affirm, that all mortal Phrensies terminate in Convulsions; but that they are terminated in Tremblings, as it is asserted 1. *Prorrh.* 9. *Galen*, in 1. *Epid. Ægr.* 4. censures as false. That they end in Convulsions and Death,



Death, is confirm'd by *Hippocrates* in many Instances, particularly the Wife of *Philinus*, 1. *Epid. Ægr.* 4. and the phrenetic Person, 3. *Epid. Stat. pest. Ægr.* 4. of whom he says, "That the second Day, in the Morning, he was speechless, had an acute Fever, and Sweats, without Intermission; had Palpitations over all his Body; and, at Night, Convulsions. On the third Day all the Symptoms were exasperated; and, on the fourth Day, he died." And of the Woman in *Cyzicus*, *Epidem. L.* 3. *Ægr.* 14. he tells us, "That, on the fourteenth Day, she was much afflicted with Convulsions, her extreme Parts were cold, she was quite delirious, had a Suppression of Urine, and died." *Galen* also, *Meth. Med. Lib.* 12. *Cap.* 8. speaking of Convulsions proceeding from an immoderate Dryness of the Nerves, tells us, "That they are consequent upon the most mortal kind of Phrensy; and that he never knew or heard of any one who recover'd, when affected with them." And, in the fifth Book of the *Epidemics*, ascrib'd to *Hippocrates*, *Text.* 84. we read, that the Maid-servant of *Conon*, labouring under a Phrensy, was taken with Convulsions, and speechless, on the fortieth Day of her Illness, and ten Days before her Death. There is also a kind of Palpitation near akin to Convulsions, which some call a convulsive Trembling, others a spurious Convulsion, others a Sultation; in which there is a Subfultus of the Parts under the Hand, when touch'd, as if they were vellicated by some pungent Humour or Vapour, the Nerves shrinking back, and retracting themselves from the painful Sensation; such is the Palpitation of Fishes on dry Land. These Palpitations, when consequent on a high Delirium, are no less mortal than Tremblings and Convulsions. But we are to make a Distinction in this Case, because these Palpitations, as well as Convulsions, if excited by acrimonious Juices or Vapours, may not always be mortal; for which Reason we are to consider the other concomitant and subsequent Signs, that we may form the better Judgment of the Event. Another Symptom, therefore, which we are to observe, is virulent Vomiting, in which adust, æruginous, or black Bile is discharged, as we are inform'd by *Hippocrates*, *Lib.* 1. *Epid. Sect.* 2. where he observes, in his second State, or *Catastasis* of the Seasons, that, of those who laboured under a Phrensy, succeeded by Convulsions, and virulent Vomiting, some died suddenly. With such Vomiting was *Philites*, labouring under a mortal Phrensy, molested, *Lib.* 3. *Epid. Ægr.* 2. Gesticulations of the Hands are also a Symptom attending a Phrensy, when fatal, according to the Judgment of *Hippocrates*, *Lib.* *Prognostic.* where he says, "That as to Gesticulations of the Hands, we are to know, that in an acute Fever, Phrensy, Peripneumony, or Cephalalgia, to wave the Hands before the Face, to seem to hunt after Flies, to pick Straws, or pull Threads out of Clothes, or Motes out of the Wall, are all bad and mortal Signs." Such were those observed in the Wife of *Deacles*, before-mention'd. A Discharge of Blood, by Drops, from the Nose, is another Symptom supervening on a Delirium, whose Event is fatal: For *Galen*, *Com.* 3. in *Prorrhetic. Text.* 49. asserts, that such an Evacuation not only implies some Difficulty in the Case, as the Author of the *Prorrhetica* pronounces it, when attended with Deafness and Listlessness; but is a very bad Sign, and, if accompanied with others which indicate the Brain to be affected, is a mortal Prognostic.

White, aqueous, and lucid Urine also, with white Fæces, are very pernicious Signs in Phrensies, according to *Hippocrates*, *Sect.* 4. *Aph.* 7. on which *Galen* says, "I never knew any one, whose Urine answer'd that Description, recover." Again, "Involuntary Emissions of Urine are of pernicious Significations," on the 1. *Prorrhetic.* 29. as are also "white Excrements," *ibid.* 13. It seems also peculiar to the worst Kinds of Phrensies, that, tho' the Tongue be parch'd with Heat, the Patient feels no Thirst, or at least drinks but very little; which are bad Signs, *ibid.* 16. Among fatal Deliria are those which are concern'd about the necessary Actions of Life, according to the Author of the *Coac. Prasag.* 98. who pronounces Deliria, about Necessaries, to be of the worst Kind; and, if increased to an extraordinary Degree, mortal. Such are those Deliria in which the Patients abstain from Meat and Drink, tho' their Tongue be parch'd and dry'd with Heat. Those Deliria are also fatal, in which the Patients undergo frequent and remarkable Alterations. Thus, 1. *Prorrhetic.* "A Phrensy, mild in the Beginning, but often changing, prognosticates a bad Event." Now there are two Ways of Mutation, or Changing, one from a good to a bad State; the other, from one bad Symptom to another. To this Purpose we are told, *Coac. Prasag.* 101. "That frequent Mutations, in a Phrensy, are a bad Sign, and shew a Disposition to Convulsions." For, certainly, such a Variety of Changes signifies either a Redundance of Humours, or that the Brain labours under a Multiplicity of Affections; as when the Patient lies for a long time quiet, silent, and sad, and, all on a sudden, becomes talkative, laughing, and restless; as *Hippocrates* observed of the Wife of *Deacles* before-mention'd. "At the Beginning, he says,

"she was cover'd up, and lay continually silent; she catch'd at the Hairs of the Bed-clothes, and pluck'd and scratch'd; now she wept, then she laugh'd, but did not sleep." And, at the End of the Relation, "she was continually cover'd, and was either full of Talk, or perpetually silent." All Deliria, proceeding from Weakness, were thought, by *Galen*, mortal, so as that none ever recover'd of them, as appears by his Comments on the first of the *Prorrhetica*: For all phrenetic Disorders require a considerable Degree of Strength in the Patient, agreeably to what we read, *Coac. Prasag.* 100. "A Delirium, seizing a Person before debilitated and exhausted, threatens the worst of Events." Deliria, in the Beginning of a Disease, are also justly formidable, as giving Suspicion of a Phrensy; for whatever, of this Nature, appears without Signs of Concoction, (which is the Thing to be regarded in the Beginning of any Disorder) shews the Patient to be in a very bad State, as we are taught by *Galen*, in his first Book of *Crises*. To proceed with our Judgment, on those Signs or Symptoms which appear with a Delirium, or are excited afterwards; bad Signs appearing, together with a Delirium, seem to threaten Death; but mortal Signs not only Death with Certainty, but also, that it is near at Hand. Among the principal bad Symptoms, a total Deprivation of Sleep, or such Sleep as excites, increases, or not, in the least, alleviates a Delirium, is a very formidable Symptom in the Opinion of *Hippocrates* and *Galen*. So, also, to sleep with the Mouth constantly gaping, in a Delirium, is a fatal Sign. *Hippoc. Progn.* and 2. *Sect. Aph.* 1. 3. An extreme Drowsiness, or lethargic Affection, after perpetual Watchings, from a Refrigeration of the Brain, or Decay of Strength, is mortal, according to the Observation of *Hippocrates*, *Lib.* 3. *Epid. Stat. pest.* where he says, "None of those who had a Phrensy were disorder'd to a vehement Degree of Madness, as is usual in other Cases, but sunk under a Cataphora, or Lethargy." But sometimes these Affections appear as critical, or significant of a *Crisis*, and are known to be so by the Signs proper to a *Crisis*. To proceed: A Delirium, accompany'd with a remarkable Forgetfulness, Listlessness, and Stupidity, is an evident Prognostic of Death, *Galen* in *Prorrhetic. Com.* 2. *Text.* 30. since for a Person not to know his familiar Acquaintance, or not to remember past Facts, shews a Refrigeration of the Brain, which, consequent upon a hot Affection, by which the Delirium was excited, can prognosticate nothing but Death, as was before observed. If, with the before-mention'd Symptoms, a Rigor or Coldness is join'd, the Fate of the Patient is inevitable, according to *Galen* in *Prorrhetic*. Of the same Signification is Stupidity; for, in the Opinion of *Galen* in *Prorrhetic. Text.* 1. they also are to be accounted phrenetic, who, being affected with a Coma, have not the Use of Reason, but talk in a delirious Manner; and, when they are awaken'd and roused by the Attendants, appear as if they were stupefy'd: For a delirious Patient not to see, is a most fatal Sign, and shews Death to be not far off. Eyes, also, avoiding the Light, involuntarily weeping, distorted, one bigger than another, the White turn'd red, or the Eyes replete with Blood, in the same Case, are mortal Signs, as we are taught by *Hippocrates*, in *Prognostic*. The Face of a fiery Colour, or well-colour'd, but of a ghastly Aspect, portends also a bad Event. 1. *Prorrhetic.* 49. 67. Violent and continual Pains of the Head and Viscera are bad Signs; as may be collected from *Aph.* 65. *Sect.* 4. A Heaviness, Coldness, or Lividness of the whole Body, or of the Hands and Feet, are no less to be dreaded; as appears from *Hippocrates*, in *Prognostic*, where, and in the *Prorrhetic. Coac. Prasag.* and *Aphor.* he also passes the same Judgment on a Loss of Voice, the Silence of the Patient, a shrill Voice, a Tongue parch'd and dry, without any Manner of Thirst, an unusual Grinding of the Teeth, Convulsions, Palpitations, Shiverings, Rigor, Tremblings, Coldness of the extreme Parts, and frequent Alterations in those Parts. Of no less mortal Signification are Restlessness, Anxiety, Difficulty of Breathing, a Loathing of all Food, and an Aversion to Drink, virulent Vomiting, cold Sweats about the Neck and Scapule, and continual Sweats over all the Body, which Physicians call *Desudation*, Blood flowing by Drops from the Nose, white, aqueous, and pellucid Urine, white Stools, and a Discharge of great Quantities of pituitous and bilious Crudities, without alleviating the Delirium, Abscesses diverted inwards, Exanthemata, or other Pustules and Efflorescences on the Skin, vanishing without a manifest Cause, or Pains arising in the ignoble Parts, and speedily ceasing: If many, or but a few, of these Symptoms accompany a Delirium, especially of the phrenetic Sort, they prognosticate Death. They portend the same Event, when consequent upon a Delirium; and more especially when it is succeeded by Tremblings, Convulsions, Hiccoughs, Loss of Voice, with a Discharge of white, clear, and pellucid Urine, such as happen'd to *Silvanus* on the fifth Day. 1. *Epid. Ægr.* 2. But the most certain of all deadly Prognostics, supervening upon a Delirium, are an extreme Lowness of the Pulse, a bad Respiration, a total Loss of Appetite, and an Abhorrence of all Food, with no Sense of Thirst, tho' the Tongue be parch'd



with Heat and Dryness. And, indeed, these three last Symptoms, that is, an extreme Lowness of the Pulse, an Abhorrence of Meat and Drink, and a bad Respiration, are of great Moment, in all Diseases, for predicting Death, and especially if accompany'd with some of the before-mentioned Signs, which, the more they are in Number or Consideration, the more certain and speedy is the fatal Event, which they portend. So that, above all the before-mention'd Signs, these three last-named, tho' accompany'd with many other good or ambiguous Signs, are of the greatest Moment for predicting the Death of the Patient; as the contrary Signs to these, which are a high Pulse, a good Respiration, and a laudable Appetite, tho' accompany'd with many pernicious and threatening Symptoms, are of chief Importance towards prognosticating a happy Event to the Disease; as *Galen* has well demonstrated in his Comment on the Case of *Heropytus* before-mention'd. *Prosper Alpinus*, de præfagienda Vita & Morte. See FEBRIS and PHRENITIS.

#### DELPHINIUM.

The Characters are,

The Leaves are lacinated: The End of the Pedicle, increasing in Thickness, forms a Placenta, on which grows a pentapetalous Flower, of a very singular Contexture; for the four lower Petals are almost orbicular; but the fifth, which is erect, is divided into five Parts, that is, a bifid Galea, on the Back of which rises another kind of Petal, with two Wings, and a hollow retroflected Spur, sheath'd in a small Vagina like it, and in the Form of a Cup. The Stamina are so numerous, that, at the lower Part, they grow together into a Silk-like Membrane. The Ovary growing on the Placenta consists of long Sheaths, or Pods, collected into a Head, having each of them its Tube, with a white Apex, opening when ripe, and replete with angulous Seeds.

*Boerhaave* mentions nineteen Species of this Plant.

1. Delphinium; perenne; montanum; villosum; Aconiti folio. *T.* 426. *Aconitum, cæruleum, hirsutum, flore Consolida Regalis.* C. B. P. 183. M. H. 3. 464. *Aconitum, lycoctonum, cæruleum, calcari magno.* J. B. 3. 657. *Aconitum, lycoctonum, flore Delphinii I. Silesiacum.* Clus. H. 94. *Aconitum, lycoctonum, flore Delphinii.* H. Eyft. Æst. o. 1. F. 11. Fig. 1. *Lycoctonum, flore Delphinii.* Dod. p. 441. PERENNIAL MOUNTAIN HAIRY LARKSPUR, WITH A MONK'S-HOOD-LEAF.

2. Delphinium; platani folio; Staphis agria dictum. *Tourn. Inst.* 426. *Elem. Bot.* 379. *Boerb. Ind. A.* 301. *Staphis agria,* Offic. Ger. 398. Emac. 495. Raii Hist. 1. 705. Park. Theat. 222. J. B. 3. 641. C. B. Pin. 324. Hist. Oxon. 3. 461. *Staphis agria, Pedicularia,* Chab. 528. *Aconitum urens Ricini fere foliis, flore cæruleo magno, Staphis agria dicta,* Pluk. Almag. 357. STAVES-ACRE.

This Plant grows to be a Foot and half, or two Foot high: The lower Leaves are large, almost as big as Vine-leaves, but rounder in Circumference, divided usually into seven sharp-pointed Segments, deeply cut in. The Leaves that grow on the Stalk, which is round, and somewhat downy, are less, but alike in Shape. The Flowers grow on the Tops of the Stalk, of a blue Colour, much like the Flowers of Larkspur, but having shorter Heels or Spurs. Each Flower is succeeded by three or four crooked Horns or Pods, in which are contain'd two or three large brown wrinkled angular Seeds. It grows in Italy, and other warmer Countries; and flowers in July. The Seed only is used.

It is seldom given inwardly, being of a hot burning Taste; tho' *Sylvius de la Boe* commends it, from twelve Grains to a Scruple, in a Dose, which purges upwards and downwards, causing a great Flux of Spittle; and is serviceable against the *Luæ Venerea*. It is sometimes used in Masticatories and Gargarisms, for the Tooth-ach. *Miller's Bot. Off.*

The Powder of Staves-acre is sprinkled upon the Head, with a View of killing Lice; or the Seeds are bruised in Oil, and the Head is anointed therewith, for the same Purpose.

The Seeds of Staves-acre, to the Number of fifteen, bruised and taken in Hydromel, are said potently to expel pituitous and glutinous Humours by Vomit, not without Danger of Suffocation; for they cause a very burning Heat and Inflammation in the Fauces. The Seeds also, chew'd, attract Phlegm from the Head to the Mouth; from whence we may easily conclude, that, if these Seeds are boil'd in Plenty of Water, and the Mouth is wash'd with the Decoction, a slight Salivation may be excited; which, perhaps, might be more happily effected by taking not fifteen of the Seeds at once, but one or two at a time, for several Days together, and so exciting a slight Salivation by Degrees: But this I look upon as a dangerous Experiment. *Raii Hist. Plant.*

3. Delphinium; latifolium; parvo flore. *T.* 426. *Consolida Regalis, latifolia, parva flore.* C. B. P. 142. Prodr. 74. M. H. 3. 466. *Consolida Regalis, peregrina, parva flore.* J. B. 3. 212. BROAD-LEAVED LARKSPUR, WITH A SMALL FLOWER.

4. Delphinium; segetum; flore cæruleo. *T.* 426. *Consolida,*

*lida, Regalis, arvensis, flore cæruleo.* C. B. P. 142. *Consolida, Regalis, flore minore.* J. B. 3. 210. *Delphinium vulgare,* Clus. H. 205. *Flos Regius, sylvestris.* Dod. p. 252. *Consolida, Regalis, flore cæruleo, minore.* Camer. a. CORN LARK-SPUR, WITH A BLUE FLOWER.

It grows plentifully amongst the Corn by the Foot-way, from Cambridge to *Feverham*; and flowers in July.

*Tabernamontanus* says, the Conserve of the Flowers eases the Gripes of Children; and *Simon Paulli* affirms, that the Flowers, macerated in Rose-water, and applied as a Cataplasm, assuage the Inflammation of the Eyes. The Plant is said to be vulnerary and diuretic. *Martyn's Tournesort.*

5. Delphinium; segetum; flore violaceo. *T.* 426. *Consolida, regalis, arvensis, flore simplici, violaceo.* H. Eyft. Æst. o. 2. F. 11. Fig. 1. a.

6. Delphinium; segetum; flore rubro. a.

7. Delphinium; arvense; flore versicolore. *Clus. H. App.* 2. *Consolida, regalis, arvensis, flore variegata.* H. Eyft. Æst. o. 2. F. 13. Fig. 1. a.

8. Delphinium; segetum; flore albo. *T.* 426. a.

9. Delphinium; vulgare; flore multiplici. *T.* 426. *Consolida, regalis, vulgaris, flore multiplici.* C. B. P. 142. *Consolida, arvensis, flore rubro pleno.* H. Eyft. Æst. o. 2. F. 14. Fig. 1. a. COMMON LARK-SPUR, WITH A DOUBLE FLOWER.

10. Delphinium; hortense; flore majore, simplici, ex cæruleo, purpureo. *T.* 427. *Consolida, regalis, hortensis, flore majore, simplici cæruleo.* C. B. P. 142. *Flos regius.* Dod. p. 252. *Delphinium, elatius, flore cæruleo.* Clus. H. 206. a. LARK-SPUR.

The Root of Lark-spur is small, and full of Fibres, perishing after Seed-time: The Leaves are roundish in Compass, divided into very fine deep Sections, of a dark-green Colour. The Stalk grows to a Yard high, much divided, and cloath'd with the like Leaves, having on their Tops long Spikes of Flowers, of an irregular Shape, made of five Leaves, with a Spur or Heel on the back Part: When these are fallen, there come long roundish sharp-pointed Horns, or Seed-vessels, containing black rugged angular Seed.

It is sown every Year in Gardens; and flowers most Part of the Summer.

This is reckon'd among the vulnerary and consolidating Plants, and is said to be of a healing Nature; but is seldom or never used in *England.* *Miller's Bot. Off.*

11. Delphinium; hortense; flore majore, simplici, rubro. *T.* 427. *Consolida regalis, simplici flore, rubro.* H. Eyft. Æst. o. 2. F. 12. Fig. 1. a.

12. Delphinium; hortense; flore majore, & multiplici, cæruleo. *T.* 427. *Consolida, regalis, flore majore, & multiplici, cæruleo.* C. B. P. 142.

13. Delphinium; hortense; flore majore, & multiplici, incarnato. *T.* 427. *Consolida, regalis, multiplici, incarnato flore.* H. Eyft. Æst. o. 2. F. 11. Fig. 2. a. GARDEN LARK-SPUR, WITH A LARGE DOUBLE FLESH-COLOUR'D FLOWER.

14. Delphinium; hortense; flore majore; & multiplici violaceo. *Consolida, regalis, multiplicato, violaceo flore.* H. Eyft. Æst. o. 2. F. 11. Fig. 3. a. GARDEN LARK-SPUR, WITH A LARGE DOUBLE VIOLET-COLOUR'D FLOWER.

15. Delphinium; hortense; flore majore, & multiplici rubro. *T.* 427. *Consolida, regalis, flore pleno, rubro.* H. Eyft. Æst. o. 2. F. 12. Fig. 2. a. GARDEN LARK-SPUR, WITH A LARGE DOUBLE RED-COLOUR'D FLOWER.

16. Delphinium; hortense; flore majore, & multiplici albo. *T.* 427. *Consolida, regalis, flore pleno, albo.* H. Eyft. Æst. o. 2. F. 12. Fig. 3. a. GARDEN LARK-SPUR, WITH A LARGE DOUBLE WHITE-COLOUR'D FLOWER.

17. Delphinium; hortense; flore majore, & multiplici, argenteo. *T.* 427. *Consolida, regalis, multiplici flore, argenteo.* H. Eyft. Æst. o. 2. F. 13. Fig. 2. a.

18. Delphinium; hortense; flore majore, multiplici, cinereo. *Consolida, regalis, flore multiplici, cinereo.* H. Eyft. Æst. o. 2. F. 13. Fig. 3. a.

19. Delphinium; hortense; flore majore, & multiplici, purpureo. *T.* 427. *Consolida, regalis, flore pleno, purpureo.* H. Eyft. Æst. o. 2. F. 14. Fig. 3. a. *Boerb. Ind. alt. Plant.*

DELPHINUS, Offic. Aldrov. de Pisc. 701. Rondel. de Pisc. 459. Charlt. Pisc. 47. Bellon. de Aquat. 9. Gesn. de Aquat. 319. Raii Ichth. 28. Fjufd. Synop. Pisc. 12. Jonf. Pisc. 47. THE DOLPHIN.

The Parts of this Animal, appropriated to medicinal Uses, are the Liver, the Ashes, the Belly, and the Fat. The Belly dried, titrated, and exhibited in some proper Liquor, is said to cure splenetic Patients. It is said, that the Liver roasted, and used with Aliments, perfectly cures tertian and quartan Fevers; as also, that Species of nocturnal Fever known by the Name of *Typhus*. The Ashes are, by *Pliny*, enumerated among the Medicines which cure the Ringworm and Leprosies.

According



According to the same Author, the Fat melted, and drank with Wine, cures dropfical Patients. *Dale.*

DELPHYS, *δελφύς*. The Uterus.

DELTA, *δέλτα*. The external *Pudendum Muliebre*. *Suidas* from *Aristophanes*.

DELTOIDES, *δέλτοειδής*. The Name of a very thick triangular Muscle covering the upper Part of the Arm, and forming what is term'd the Stump of the Shoulder. It is broad above, and narrow below, in a triangular Form; and its Name is taken from the Resemblance it bears to the Greek Letter  $\Delta$  *Delta*; but, to make the Comparison hold, either the Letter or the Muscle must be inverted, and the Muscle flatten'd.

It is made up of eighteen or twenty small single Muscles, in an opposite Situation with respect to each other, and united by middle Tendons, so that, taken all together, they form several penniform Muscles. The outer Surface appears almost wholly fleshy, but, on the inner Surface, we see the several Tendons.

All these small Muscles are disposed in such a manner, as to form a considerable Extent at the upper Part; from whence they contract gradually in Breadth, till they end in a thick strong Tendon, by which the whole Muscle terminates in an Angle or Point.

Above, it is fix'd in the whole inferior Labium of the Spina Scapulae, in the convex or long Edge of the Acromium, and in the third Part of the anterior Edge of the Clavicle, next that Apophysis. It surrounds the Angle, form'd by the Articulation of these two Bones, by a particular Slope and Fold, contrived for that Purpose.

From thence it runs down, above one Third of the Length of the Os Humeri; where it is inserted, by a thick Tendon, in the large, muscular, rough Impression, below the bony Ridge, which goes from the great Tuberosity of the Head of the Bone, and forms the highest Border of the Groove or Chanel.

This Insertion seems to be immediately implanted in the Substance of the Bone, passing through the Periosteum, which is commonly the Case in all Insertions in these Kinds of Impressions, Eminences, or considerable Tuberosities. It lies below that of the Pectoralis Major, and a little more forward. Some of the Fibres of this Muscle are fixed in the Aponeurosis, common to all the Muscles which cover the Arm.

This Muscle may be distinguish'd into three principal Portions, one of which is fixed in the Spine of the Scapula, one in the Acromium, and one in the Clavicle. They are separated from each other by a small Quantity of Fat, or cellular Substance, chiefly near the Basis of the Muscle.

The middle and strongest Portion runs down almost directly to its Insertion in the Os Humeri. The lateral Portions seem to end sooner, but it is only because they turn inward toward the Bone, and thereby form the biggest and thickest Part of the Tendon. The anterior or clavicular Portion sends off some Fibres to the Bone, before it reaches the Tendon.

The Portion fixed in the Spine of the Scapula sends backward a thin Aponeurosis, which is strengthen'd by another tendinous or ligamentary Series of Fibres. This Aponeurosis is fixed in the Basis of the Scapula, below the Spine; and from thence is extended, toward the inferior Angle. The other Series begins at the Spine, and ends near the same Angle, at the Beginning of the inferior Costa. These, together with the great Tendon, seem to contribute to the Formation of the tendinous Expansion which covers the Muscles of the Arm.

At its upper Part, this Muscle joins the Insertion of the Trapezius, and below, that of the Brachialis. Anteriorly it joins the Pectoralis Major, being distinguished from it only by a small Line of Fat, or of cellular Substance, and a small Vein call'd Cephalica. It covers the Head of the Os Humeri, and adheres to the capsular Ligament of the Joint; and it likewise covers the Insertion of the Pectoralis Major. *Winslow's Anatomy.*

DEM. Human Blood. *Rulandus.*

DEMENTIA. Madness. See MANIA. Or sometimes it implies a DELIRIUM, which see.

DEMETRIOS, *δημήτριος*, from *δημήτριος*. The Goddesses *Ceres*. The same as *Cerealis*. See CEREALIA.

DEMOCRATIS THERIACA. A Theriaca describ'd by *Actius*, *Tetrab.* 4. *Serm.* 1. *Cap.* 111.

DEMONSTRATIO. Demonstration; that is, a certain, evident, and invincible Proof of the Truth of a Proposition. But it relates no more to Medicine, than to any other Science. It is to be lamented, that Demonstration is much more talk'd of by Physical Authors, than found in their Writings.

DEMOS, *δῆμος*. Fat. But *δῆμος*, with a Circumflex, signifies the People.

DEMOTIVUS LAPSUS. Sudden Death. *Rulandus.*

DEMULCENTIA MEDICAMENTA are Medicines which render the acrimonious Humours mild. See ALTERANTIA.

DEMUSCULATUS. The same as *AMYOS*, which see.

DENARIUS.

The *Denarius* was the chief Silver Coin among the Romans. As a Weight, it was the seventh Part of a Roman Ounce.

Mr. *Greaves* affirms, that having, in *Italy* and elsewhere, perused many hundred *Denarii Consulares*, he found, by frequent and exact Trial, the best of them to amount to 62 Grains *English*, such as he had carefully taken from the Standards of the *Troy* or Silver Weights, kept in the *Tower of London*, and in *Goldsmiths-Hall*, and in the University of *Oxford*. He arrives very near at the same Conclusion, by two Experiments that were made, of the Weight of Water contain'd in the *Congius* of *Vespasian*, which was 10 Roman Pounds. One Experiment was made by *Villapandus*, on the *Congius* itself; and the other by *Gaffendus*, upon a Medal. By the first of these Experiments, the Weight of the *Denarius*, or the seventh Part of a Roman Ounce, comes out 62 Grains, by the second 62 $\frac{1}{3}$ : Neglecting the Fraction, he has stated the Value 62 Grains, or 7 Pence 3 Farthings *English*, allowing 8 *English* Grains to the Silver Penny. This Valuation *Arbuthnot* has follow'd in the Computation of Sums; that is, supposing Silver at 5 Shillings the Ounce, which, altho' not exactly true, (for, by the present Standard of the Coinage, 62 Shillings, or 3 Pounds 2 Shillings, is coined out of one Pound Weight of Silver) since we don't know the Fineness of the Roman Money, may be a Supposition as good as any other, and prevent some Trouble in Computation.

The Roman Ounce is certainly our *Averdupois* Ounce; but *Arbuthnot* owns, that he has differ'd, in a small Matter, from Mr. *Greaves*, in settling the Quantity of *Troy* Grains contain'd in an Ounce *Averdupois*; for, supposing the *Averdupois* Pound to be to the *Troy* Pound as 175 to 144, and consisting of 16 Ounces, makes the Roman or *Averdupois* Ounce to be 437 $\frac{1}{2}$  *Troy* Grains, and the Roman Pound 5250 Grains. The Proportion that was given as a true one, was 17 to 14, neglecting the last Figures; and consequently the Proportion of the Roman *Averdupois* Ounce, to the *Troy* Ounce, is precisely as 51 : 56; and by this the Roman Pound will consist of 5245 $\frac{1}{2}$  Grains *Troy*, which is 4 $\frac{1}{2}$  Grains less in the Pound; and, if it be a Mistake, is a very considerable one. The *Denarius*, according to *Arbuthnot's* Supposition, will come out 62 $\frac{1}{3}$  Grains. The Fraction is not to be neglected in reckoning the Pound. This makes it highly probable, that the Romans left their Ounce in *Britain*, which is now our *Averdupois* Ounce; for our *Troy* Ounce we had elsewhere.

That the *Denarius* was the seventh Part of the Roman Ounce, is clear from Multitudes of Passages. *Celsus*, *Lib.* 5. *Cap.* 17. *Sed & antea scire volo in uncia pondus denariorum esse septem.*

Another Way that Mr. *Greaves* made use of to find the Weight of the *Denarii* was, by the Weight of Greek Coins, especially *Attic Tetradrachms*; for the *Denarius* was always reckon'd equal to the *Drachm*: But those Experiments bring out the *Denarius* heavier; for, weighing many *Attic Tetradrachms*, with the Image of *Pallas* on the fore Part, and of the *Noctua* on the Reverse, he found the best of those to be 268 Grains; that is, each particular *Drachma* 67 Grains, and from the Golden *Didrachms* much the same. He mentions one from *Snellius*, that weigh'd 134,5 of our *Troy* Grains, which makes it 67 $\frac{1}{2}$ . That the ancient Roman *Denarius* and *Attic Drachma* were reckon'd equal, appears partly from what has been observed before; and further from the Testimony of *Pliny*, who lived from the time of *Vespasian* to that of *Trajan*, who affirms expressly, that the *Drachma Attica* had the Weight of the Silver *Denarius*. *Cleopatra* affirms, that the *Italic Denarius* was one *Drachm*. *Cicero*, naming the *Donative* of *Octavius* to the veteran Soldiers, call'd it 500 *Denarii*; and *Dion* calls the same 500 *Drachms*. *Galen* saith, that by a *Drachm* is meant the same Weight the Romans call a *Denarius*. This is plain from an Interpretation of *Aulus Gellius*. *Plutarch* computes the Sums which the Romans express by *Sestertii*, in *Drachms*, at 4 *Sestertii* to the *Drachm*, that is, the Number of *Sestertii* in the *Denarius*. *Strabo* saith, that, in the Siege of *Caslinum*, a Mouse was sold for 200 *Drachms*; this *Valerius Maximus* translates 200 *Denarii*. *Athenæus* saith, that 400 *Attic Talents* make 240 Myriads of *Denarii*, that is, 2,400,000 *Denarii*, = 400 Talents, or one Talent = 6000 *Denarii*, the Number of *Attic Drachms* in a Talent. *Festus Pompeius* saith in express Terms, that an *Attic Talent* contains 6000 *Denarii*. The same appears by comparing *Livy* with *Polybius*.

*Arbuthnot* has been the more copious in Quotations upon this Subject, to shew the general Consent of Authors, of all Ages and Times, in the Equality of Value of the *Attic Drachm*, and Roman *Denarius*. And it would bring in a great Confusion to change that Way of reckoning; but then the Difficulty is, how to preserve the Equality between two Coins, which appear so different in Weight as 62 and 67 Grains.

*Arbuthnot*, in the first Place, gives you *Greaves's* Solution of this Difficulty, in his own Words; which are, first, "That the *Denarius* and *Attic Drachm* being distinct Coins of different States, and not much unequal in the true Weight, it is no Wonder, especially in *Italy*, and in the Roman Dominions, that they should pass one for another, no more than that the Spanish *Reals*, in our Sea-towns in *England*, should pass

" for



for *Tessars*, or the Quarter of the *Dolar* be exchange'd for our Shillings; whereas the *Rial*, in the intrinsic Valuation, is better than our *Tessar*, by four Grains and somewhat more; and the Quarter of the *Dolar* is better than our Shilling by more than eight Grains, or a Penny: But, because they want the Valuation, Character, and Impression of our Princes, which I call the *Extrinsic* of Coins, therefore doth the *Spanish* Money fall from its true Value with us, and so would ours do in *Spain*. By the same Analogy must we conceive the *Attic Drachms*, tho', in the intrinsic, they were somewhat better worth than the *Denarius*. And this seems to be implied by *Volusius Metianus*: *Victoriatus nunc tantundem valet, quantum quinarius olim. At peregrinus nummus loco mercis, ut nunc Tetradrachmum & Drachma, habebatur*; which Words of his, *loco mercis*, plainly shew they made some Gain of the *Tetradrachmum* and *Drachma*, as our Merchants and Goldsmiths do of the *Spanish Rials*, and Quarters of a *Dolar*, which they could not, if they were precisely equal, but must rather be Losers in the melting or new coining of them: And therefore all modern Writers, that have treated of this Argument, (some of them making the *Drachma* less than the *Denarius*, others equal, but none greater) have been deceived by a double Paralogism, in standing too nicely upon the bare Words of the Antients, without carefully examining the Things themselves: First, in making the *Denarius* and *Attic Drachm* precisely equal; because all antient Authors generally express the *Attic Drachm* by the *Denarius*, or the *Denarius* by the *Drachm*; either because, in ordinary Commerce, and vulgar Estimation, they passed one for another in the *Roman* State; or else, if any were so curious to observe their Difference, as surely the *καλλιστα* were; yet, by reason of their Nearness, and to avoid Fractions, and having no other Names for their Coins, that were precisely equal, whereby to render them, therefore all *Greek* and *Latin* Authors mutually used one for the other. And, secondly, because some Writers, as *Dioscorides* and *Cleopatra*, affirm that the *Roman Ounce* contained eight *Drachms*; therefore modern Authors infer, that the *Denarius* being equal to the *Drachm*, and eight *Drachms* being in the *Roman Ounce*, (as so many were in the *Attic*) that therefore there are eight *Denarii* in the *Roman*, and consequently that the *Roman* and *Attic* Ounces are equal: Whereas *Celsus*, *Scribonius Largus*, and *Pliny*, expressly write, that the *Roman Ounce* contain'd, in their Time, (which was after *Dioscorides*) seven *Denarii*; and, being natural *Romans*, and purposely mentioning the Proportion of the *Denarius* to the Ounce, thereby the better to regulate their Doses in Physic, it is not probable but they must better have known it than the *Grecians*. But *Arbutnot* seems to be afraid this Solution will not be sufficient to answer about 5 per Cent. Difference in the Value of the Coins. If an *Attic Drachm* of 67 Grains passed for a *Roman Denarius* of 62, the Exchange must have been very much on the *Roman* Side.

The learned Bishop *Hooper's* ingenious *Inquiry into the State of antient Measures* has given a great many new Lights into this intricate Subject; and, perhaps, what he suggests may be an Answer to this Difficulty: His Words are as follows, pag. 44. "So is the Proportion, as well of the *Attic* Weight, as of their Coin, well known; but the Value of each Piece not so well ascertain'd as one could wish: For the *Drachma*, from whence all their Money is best estimated, and which is also the principal Weight, is very differently stated. Our accurate Mr. *Greaves*, upon the weighing of many *Attic Tetradrachms*, found some (the best, he saith) of 268 Grains, which give 67 for the *Drachma*: And, examining the *Golden Didrachms*, coined after the Example of the old *Durici*, by *Philip* and *Alexander*, as he mentions one of each from *Snellius*, which weighed 134,5 of our Grains; so he specifies three of *Alexander's*, which he had seen, that wanted but half a Grain of 134, or twice 67 Grains. Such too Dr. *Bernard* met with; but more commonly with those of 66 to the *Drachma*. The Generality of elder Coins that remain give it at 65 Grains, some *Arabian* Physicians at 64,28; and it is certain, that, in the time of the first *Roman* Emperors, it came to be under 63 Grains, and not very long afterwards to be under 55, and thus to be  $\frac{1}{2}$  of a *Roman* Ounce. Thus did the Money *Drachma*, in Process of Time, decrease, as is found by the Trial of a Balance, and will appear by the Testimony of old Authors, comparing them with the *Roman* Weight and Money. But, all the while, we may suppose the ponderal *Drachm* to have continued the same, just as it happen'd to us, as well as our Neighbours, whose ponderal *Libra* remains as it was, tho' the nummery hath much decreased."

And, pag. 55. "This gradual Decrease, the succeeding Coins of the several Ages shew us: And it may be convenient, therefore, for the Reduction of their Money to ours, to form different Tables for them: To one, for Example, after *Solon's* Standard; which may serve, with some little

"Allowance, till the Days of *Alexander*: Another, more suited to the Times that follow'd, unto the Subjection of the *Greeks* to the *Romans*, and at the Rate of 65 Grains, or thereabouts, to the *Drachma*: And a third of 92,57; which was equal, as we shall find, to the *Denarii* of that Weight under the first *Roman* Emperors; and had been equal, as I shall suppose, for some considerable time before."

Mr. *Greaves* is of Opinion, that the Alteration mention'd by *Pliny*, in that forecited Passage, *Lib. 30. Cap. 3.* of the *Denarius* being ordered to pass for 16 instead of 10 *Affes*, continued from the first Institution of it, in the second Punic War, without any Interruption, to *Justinian's* time; but this Opinion is contrary to the whole classical Style, in which a *Denarius*, 4 *Nummi Sestertii*, and 10 *Affes*, are Terms equivalent, and denote the same Sums. To change that Way of reckoning, would be to introduce nothing but Confusion: It is not credible, that the Writers expressed the Valuation of the *Denarius* according to its first Institution, without regard to the present Valuation.

He is surpris'd at the strange and unadvised Proportion betwixt the Brass and Silver Monies of the first Times; that X Pounds of Brass should be but answerable to the 84th Part (for so much, or near it, was the *Denarius*) of a Pound of Silver; or, to speak more clearly, that one Pound of Silver should be equal in Valuation to 840 Pounds of Brass.

I am of Opinion, that, tho' *Pliny* gives you the true Matter of Fact, he assigns a false Reason for it; for he seems to attribute the Cause of the Diminution of the Weight of the *Affes* to the Necessities of the Commonwealth, whereas it was undoubtedly the Change of the Balance of the two Metals of Brass and Silver; and, for that Reason, the Commonwealth gradually reduced the Weight of their *Affes*, finding the former Proportions too high.

Another Method which Mr. *Greaves* takes to determine the Weight of the *Denarius*, and the gradual Diminution of it, is by the Weight of several *Aurei*; it being probable, that, as the *Athenians* made their *χρυσος* or *Aurei* double in Weight to the Silver *Drachma*, so, in Imitation of them, the *Romans* made their *Aureus* double in Weight to the *Denarius*; from whence it is concluded, that the *Aureus Romanus* falling in its Weight, the *Denarius* likewise, of Necessity, must fall. In what manner the *Aureus* was first coined, and how afterwards it lost of its primitive Weight, *Pliny* informs us, *Lib. 33. Cap. 3.* *Aureus nummus post annum LXII. percussus est quam argenteus, ita ut scrupulum valeret Sestertius vicens, quod efficit in libras ratione Sestertiorum, qui tunc erant, Sestertius 155555. Post hæc placuit xL. M. signari ex auri libris; paulatimque principes imminuere pondus, imminuisse vero ad xlv. M.* This Passage is corrected by *Greaves*, after the following Manner: *Postea placuit x. xl. signari ex auri libris, paulatimque Principes imminuere pondus, imminuisse vero ad xlviii.*

It is to be observed, that *Pliny*, who mentions the Diminution of the Weight of the *Aurei* so nicely as to specify the exact Proportions, says nothing of the Diminution of the Weight of the *Denarius*: I therefore think it is not perfectly evident, that the *Denarius* kept Pace with it, altho' it is generally agreed, that the *Denarius* fell from  $\frac{1}{4}$  to  $\frac{1}{8}$  of an Ounce; and the accurate Bishop of *Bath* and *Wells* has made two different Tables for the Reduction of them to our Standard. But the *Denarius* of the classical Authors, which is allow'd to be the seventh Part of an Ounce, is made use of in the Computations of the *Roman* Money.

The Subdivisions of the *Denarius* were, the *Quinarius*, or *Half-denarius*, so called from its Value of five *Affes*; the *Half-denarius* was likewise call'd *Victoriatus*.

*Celsus* divided the *Denarius* into six Parts, which he call'd *Uncie*, *Uncia* being a general Word for the Division of any Integer. This was done in Imitation of the *Greek* Physicians, who, after the manner of their Country, divided their *Drachma* into 6 *Oboli*.

The Stamp of the *Denarius* was the Image of the Consul or Prince under whom it was coined; which is plain from those now extant, and Passages of Authors.

The Inscription commonly express'd the Name of the Prince, and the Occasion of the coining it.

The common Mark of the *Denarius* was an X, or X̄, in Imitation of which, among the *Latin* Physicians, it grew to an ✕. The *Greeks* used the Word *δραχμιον* in the neutral Gender. *Arbutnot* of *Weights*, &c.

DENDE. The Oriental Name for a Species of *Ricinus*, call'd also *ABEIMOLUCH*.

DENDROIDES. A Name for Plants, which grow like Trees. *Arborecent. Blancard.*

DENDROLIBANUS. Rosemary. *Blancard.*

DENDROMALACHIE. A Name for the *Malva arborecent*, a large Species of Mallows. *Blancard.*

DENDRON, *δένδρον*. A Tree.

DENEQUAT. Borax. *Rulandus.*

DENODATIO. Dissolution.

DENS.



## DENS. A Tooth.

Whoever has been afflicted severely with the Tooth-ach, will think this an Article of some Importance; for which Reason I shall give their Anatomy, Diseases, and Methods of Cure; having first specify'd some Plants which are call'd by the Name of *Dens* among Botanists.

DENS CABALLINUS is the HYOSCYAMUS.

DENS CANINUS is a Name given to several Species of the *Panicum*; which see.

DENS CANIS.

The Characters are,

The Flower is shap'd like a Lily, hexapetalous, with long reflected Petals, naked, pendulous, and but one on a Stalk. The Fruit is roundish, and full of oblong Seeds; the Root is fleshy, and shap'd like a Dog's Tooth; and the Leaves are like those of the Cyclamen.

*Boerhaave* mentions five Species of this Plant; which are,

1. *Dens Canis*; latiore, rotundioreque, folio; flore candido. *C. B. P.* 87. *Var.* THE BROAD ROUND-LEAV'D DOG'S-TOOTH, WITH A WHITE FLOWER.

2. *Dens Canis*; angustiore, longioreque folio. *C. B. P.* 87.

3. *Dens Canis*; angustiore; longioreque; folio; flore ex albo purpurascente, minore.

4. *Dens Canis*; angustiore, longioreque, folio; flore suave-rubente. *H. R. Par.* LONG NARROW-LEAV'D DOG'S-TOOTH, WITH A FINE RED FLOWER.

5. *Dens Canis*; latiore, rotundioreque, folio; flore ex pur-pura rubente, majore. *C. B. P.* 87. *Var.* BROAD ROUND-LEAV'D DOG'S-TOOTH, WITH A LARGE PUR-PLISH RED FLOWER. *Boerb. Ind. alt. Plant. Vol. 2.*

*Clusius* was told, that the Women in *Styria* use to sprinkle the Flower of the dry'd Root of the first Species in their Chil-drens Pap, to kill and expel the small Worms of the Belly. Drank in Wine, it is an approv'd Remedy for the Colic, and is found to be nutritive, and to restore lost Strength; and, taken in Water, it cures Children of the Epilepsy.

*Lobel* informs us, that its hot and humid Substance, attended with somewhat of Acrimony, is a potent Provocative to Venery: Hence some take it for the *Satyrion Erythronium* of *Dioscorides*, but erroneously, in *Parkinson's* Opinion, who will have the *Tulipa* to be the *Satyrion Erythronium*. *Ray*.

DENS LEONIS.

The Characters are,

It agrees, in all respects, with the Hawk-weed; but only in its having a single naked Stalk, with one Flower upon the Top, whereas the Hawk-weed hath branching Stalks: To which may be added, the Flowers are for the most part fistu-lous or piped.

*Boerhaave* mentions twelve Species of this Plant, which are,

1. *Dens Leonis*; latiore folio. *C. B.* 226. *Tourn. Infl.* 468. *Boerb. Ind. A.* 88. *Dill. Cat.* 50. *Buxb.* 96. *Dens Leonis*, *Tar-raxacum*, *Offic.* *Dens Leonis*, *Ger.* 228. *Emac.* 290. *Raii Hist.* 1. 244. *Synop.* 76. *Dens Leonis vulgaris*, *Park.* 780. *Hist. Oxon.* 3. 74. *Hedypnois sive Dens Leonis*, *Fuchsi*, *J. B.* 2. 1035. *Sive Dens Leonis*, *Chab.* 323. DANDE-LION.

The Leaves of Dandelion are of a yellowish green Colour, smooth, and of four or five Inches in Length, to one of Breadth, cut into several Jags, which end in sharp or Tooth-like Points. The Flowers grow upon round single hollow Pipes or Stalks, compos'd of a great Number of slender, flat, yellow Petals, inclos'd in a green Calyx. This Seed is long and narrow, set about the Head in a globular Form, with a Tuft of long Down at the End, by which it is easily wasted about by the Wind from Place to Place. The Root is about a Finger thick, long and whitish within, and full of a bitterish Milk, as is the rest of the Plant. It grows every-where in the Fields and Meadows, flowering the greatest Part of the Year. The Roots and Leaves are used.

Dandelion is cooling and aperitive, good to cleanse the Kidneys and Bladder, and to provoke Urine; it is boil'd in Posset-drink, and frequently us'd in all kinds of Fevers: The Leaves, beaten to a Cataplasm, are likewise applied to the Wrists in the same Distempers. *Parkinson* commends a De-coction of the Leaves and Roots in Wine or Broth for a Con-sumption, or any ill Habit of Body. The young Leaves, when they just appear above Ground, and are white and tender, are much coveted by many as a Salad, early in the Spring. *Miller's Bot. Off.*

Its Leaves are very bitter, and give a faint Tincture of red to blue Paper; the Roots give it a much deeper; they are bitter, styptic, and deterfive: Its Salt very much resembles that which *Mullerus* has call'd *Terra foliata Tartari*; but, in the Dandelion, this Salt is much more acid in the Roots than in the Leaves, and is united in all these Parts with a great deal of Oil and Earth.

Thus this Plant is aperitive, diuretic, vulnerary, and febri-fugous. *Tragus* prescribes the Water of it in internal Inflam-mations. *Barbette* advises to take the Juice of it. It purges

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the Blood by Urine: The Juice is successfully used in a Ne-phritic Colic, and Retention of Urine: The Leaves of Dan-delion are eaten as a Salad, with Oil and Sugar. To abate a violent Cough, and cure Rheums, they boil, Morning and Evening, a Quarter of a Pint of Cows Milk, and pour upon it an equal Quantity of the Decoction of Dandelion, boiling hot, and a little Sugar-candy: Its Extract is given from half a Dram to a Dram and a half: The Puffin of its Roots cools, provokes Urine, and is good for all Sorts of Fevers. *Martyn's Tournefort.*

2. *Dens Leonis*; angustiore folio. *C. B. P.* 126. *M. H.*

3. 75. *Aphaca, angustioris folii.* *Cæsalp.* 508.

This Species seems to be but a Variety of the former, which varies in the Bigness and Incisure of its Leaves. *Martyn's Tournefort.*

3. *Dens Leonis*; *Græcus*; foliis *Erysimi* crassius et lucen-tibus. *T. Cor.* 35. a.

4. *Dens Leonis*; *Monspeliensium*; *Asphodeli* bulbillis. *Lob. Adv.* 83. *Obs.* 117.

5. *Dens Leonis*; minimus; asper. *T.* 469. *Hieracium, pumilum, saxatile, asperum, radice præmorsa.* *C. B. Prodr.* 66. a.

6. *Dens Leonis*; subasper; parvo flore. *Hieracium, dentis Leonis folio, monoclonum, subasperum.* *C. B. P.* 127.

7. *Dens Leonis*; asper; minor. *Hieracium, dentis Leonis folio, hirsutie asperum, magis laciniatum.* *C. B. P.* 127. *Hie-racium, dentis Leonis folio, hirsutie asperum, minus.* *C. B. Prodr.* 63. 1. *lc. & Deser.*

8. *Dens Leonis*; qui *Pilosella* *Officinarum.* *Tourn. Infl.* 469. *Boerb. Ind. A.* 89. *Auricula muris, Pilosella, Offic.* *Chab.* 323. *Pilosella repens*, *Ger.* 513. *Emac.* 638. *Raii Hist.* 1. 242. *Synop.* 75. *Pilosella minor vulgaris repens*, *Park.* 689. *Pilosella major, repens hirsuta*, *C. B.* 262. *Dill. Cat.* 83. *Buxb.* 262. *Dill. Cat.* 83. *Buxb.* 260. *Pilosella majori flore, sive vulgaris repens*, *J. B.* 2. 1039. *Pilosella monoclonos repens vulgaris minor*, *Hist. Oxon.* 3. 77. COMMON MOUSE-EAR.

This is a low creeping Plant, sending from a small stringy Root, several trailing Branches lying on the Ground, and shooting out Fibres from the Joints, by which it takes Root in the Earth. The Leaves grow alternately on the Stalks, of an oval Form, about an Inch long, and half so much broad, sharp-pointed, green above, and whitish underneath, cover'd thick with stiff, long, brown Hairs: The Flowers stand upon Foot-stalks, four or five Inches long, of the Shape of *Dandeli-on*, but smaller, of a whitish yellow Colour above, with se-veral purplish Streaks underneath: The Stalks, when broken, emit a whitish Milk, in a small Quantity. The Flowers pass away in a white Down, in which lies small long Seed. It grows every-where upon Heaths and Commons, and flowers most Part of the Summer.

Mouse-ear is of a bitterish styptic Taste, and is accounted to be drying and binding, and a good vulnerary Herb, and helpful for all Sorts of Fluxes: A Decoction of it, used as a Gargarism, is commended for Ulcers in the Mouth. *Dr. Hulst* made use of the Juice of Mouse-ear, as a Remedy against the *Herpes miliaris*, or Shingles. *Ray's Catalogue.*

In the old *Dispensatories*, there was a Syrup that took its Name from this Plant, which is now out of Use, and there-fore left out in the new. *Miller's Bot. Off.*

This Plant is very bitter, and reddens blue Paper a little. By the chymical Analysis, beside several acid Liquors, it yields a good deal of Oil and Earth, a little urinous Spirit, and no concreted volatile Salt; which shews it to contain a Salt approaching to that of Alum, wrapped up in a good deal of Sulphur, and mixt with a little Sal Armoniac. Thus the Mouse-ear is vulnerary and deterfive. *Tragus* affirms, that the Infusion of it in Wine or Water, with a little Sugar, is good for the Jaundice, and to prevent the Dropsy. *Tabernaemontanus* says, the *Pilosella* is a Specific for Ruptures. The Ex-tract of it is used for internal Ulcers and a Phthisis. *Pena* and *Lobel* thought it to be admirable for the Stone: They affirm'd that Blades of Knives, quenched in the Juice or Decoction of Mouse-ear, would cut Iron or Stone without blunting. *Martyn's Tournefort.*

9. *Dens Leonis*; præmorsa radice; major. *Hieracium, nigrum, præmorsa radice, majus.* *C. B. P.* Var. 128.

10. *Dens Leonis*; folio *Cichorei* glabro; seminis pappo ri-gido, flavo.

11. *Dens Leonis*; foliis *Erysimi* vulgaris. *T. C.* 35. *Tar-raxacum humile.* *Hocc. Mus. Tab.* 106. a.

12. *Dens Leonis*; minor; foliis radiatis. *C. B. P.* 126. *Prodr.* 62. *Boerb. Ind. alt. Plant. Vol. 1. p.* 88.

This Plant is of a drying, attracting, and purifying Nature: It is good for Wounds, whether external or internal: It also cleanses and heals Ulcers and Wounds of the Head: It stops Fluxes, Dysenteries, Vomiting of Blood, Bleedings at the Nose, and too plentiful Discharges of the Menses: It is ex-cellent for the Breast and Lungs, cures the Jaundice and

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Consumption, dissolves the Stone in the Bladder and Kidneys, and carries off Inflammations of the Spleen. *P. Poter. Pharm. Spag. L. 1. S. 1. C. 2.* A Decoction of it, drank for forty Days, is a sovereign Remedy in obstinate Itches. *Jul. Cæs. Claud. Consil. Med. 47.* The Country People boil it in Ale, which they drink, when they are indispos'd. The Powder of the Root, and of the Herb itself, is an admirable Remedy for the Ruptures of Children, if a little of it is given them every Day in their Food. See *Malach. Gefer. Delegraph. C. 6. K. Sennert. Tract. de inf. Cur. p. 2. C. 24.* This Herb, when boil'd in small Beer, proves an excellent Remedy for the Tooth-ach, by washing the Mouth with it. If boil'd in Wine, it speedily cures Ulcers of the Mouth, *Joh. Heurn. Meth. ad Prax. L. 1. p. 125.* The Herb, when bruised and apply'd by way of Cataplasin, cures Runnings and Exulcerations of the Ears: The Juice is also excellent in Pains of the Ears. The Herb, reduc'd to Powder, and snuff'd up the Nostrils, stops Discharges of Blood from the Nose; and, if laid upon Wounds, stops Hæmorrhages. *Joh. Hocker. Prax. Aur. L. 1. Cap. 17.* The Water, distil'd from the Fruit, is good for Consumptions; diminishes preternatural Heats, cures Vomiting of Blood, stops the excessive Discharges of the Menfes, and is good in Dysenteries and the Jaundice. It also kills Worms. *Barthol. Zorn. Botanolog.*

#### Of the T E E T H.

: As every Part of the human Body loudly proclaims the ineffable Wisdom, and diffusive Goodness, of its glorious Architect and Contriver; so also the Teeth, their exquisite Order, and curious Structure, are so many Proofs, richly pregnant with inrefragable Arguments for the stupendous and amazing Power of the Venerable Being, who form'd them. The first memorable Circumstance which occurs with respect to the Nature of these Substances, is, that in Hardness, and a durable Texture, they far surpass all the other Parts of the Body. Hence, according to *Tertullian*, in his Treatise *de Resurrectione*, the mistaken Piety of the Antients induc'd them to bury the Teeth in the Earth, since they remain'd sound for several Hundreds or Thousands of Years; and their Design, in this Practice, was to render the Body entire at the Resurrection. When we reflect upon the beautiful Order and Disposition with which they are rang'd in the Extremities of both Maxillæ, or Jaw-bones, we cannot fail to be struck with awful Impressions of the exquisite Skill and superior Contrivance, with which they are form'd; for they are so situated, that the superior and inferior Rows are indeed capable of being join'd, tho' not all at one and the same time, that by this means the Actions of Incision and Mastication may be varied at Pleasure; for, when the *Dentes molares* are join'd, the anterior Teeth of the superior Row project beyond, and partly cover their corresponding Teeth of the inferior Row: But when the Extremities, or Points of the anterior Teeth are join'd, the *Dentes molares* remain at a Distance from each other; by which means they enjoy Rest, and are subjected to Action reciprocally, and by turns. This surprising Instance of Art and Design long ago appear'd to *Galen*, as we learn from his Treatise *de Ossibus*, abundantly sufficient to refute those ludicrous Calumniators of Nature, who ascribe the most curious of her Productions to a casual and fortuitous Concourse of Atoms. Without this Mill, as it may be call'd, of the Microcosm, a due Mastication, which, as *Helmont* excellently observes, in his Treatise *de Virtutibus Ratione*, greatly contributes to the Preservation of Life, cannot be perform'd. We shall therefore, at present, consider their Nature and Structure, their Connection and Use, the several Causes by which they are injur'd, and the various Medicines accommodated to remove the Misfortunes and Indispositions to which they are subject.

Omitting, therefore, too minute and prolix Disquisitions with respect to the Name, we shall only observe, that in former Ages they were call'd *Dentes*, as it were, from *Edentes*. The Teeth, then, are bony Parts of the Body, consisting of two Substances; the one intensely hard, and as it were of a stony Texture; and the other softer, but also of a bony Nature. Internally they are furnish'd with a certain Cavity; they are fix'd into the Sockets of the Maxillæ, by that particular Species of Articulation, call'd *Gomphosis*; and are destin'd for the Purposes of Mastication, Articulation of the Voice, and Ornament. First, then, we are to observe, that the Teeth consist of two Substances, the exterior of which is highly hard like a Stone, tho' it does not partake of a stony Nature; as is obvious from putting an entire human Tooth into a sufficient Quantity of Aqua-fortis, for some Hours, by which it is entirely dissolv'd, whilst there remains a very small Quantity of a glutinous Substance, which seems to be a sulphureous and somewhat pinguious Portion of the Teeth. If to the Solution, when sufficiently saturated, we add Oil of Tartar *per Deliquium*, there is produc'd a highly white Magistery, in medicinal Virtues agreeing with that prepar'd from the Boar's Teeth,

or the Elk's Hoof. But such a chymical Solution cannot be produc'd with respect to Flints, and genuine Stones. The exterior Substance, however, of the Teeth is so hard and solid, that, by a violent Attrition or Concussion with Iron, it emits large Quantities of Sparkles. But this only holds true, with respect to the *Dentes molares* of the larger Animals, which are capable of making a considerable Resistance: This hard and stony Part of the Teeth is only observ'd in those Portions of them, which lie without the Sockets of the Gums; and, like a Bark or Covering, surround the bony Part of the Teeth; for the Roots of the Teeth, which are conceal'd in the Sockets and Gums, are only of a bony Nature, and, consequently, of a Colour not so white and splendid, as the external Part which is uncover'd. But the external Part is the hardest, not only that, it may be Proof against Wounds and Injuries, but also that it may be the better qualified for inciding and breaking the Aliments. The interior bony Matter, on account of the greater Laxity of its Pores, is more easily dissolv'd and consum'd. Hence 'tis cover'd with an external harder Bark, lest, perhaps, some of the more acrid and corrosive Parts of the Aliments should injure or destroy it. This internal Substance of the Teeth is the Part principally affected in a Caries; for the external Covering is rarely seen totally, but only partially consum'd. Besides, the Structure of the external stony Covering of the Teeth differs from that of the internal Part; for, in the former, the Striæ or Furrows terminate obliquely in small Circles: But the interior, softer, and principal Part of the Teeth consists of several Layers of Fibres, longitudinally laid over each other. When a Resolution is made by a long Maceration of the Bones, these Layers become sufficiently conspicuous; for the bony reticular Plates may by this means be separated entire.

Above, we have observ'd, that a certain Cavity is found in the Teeth, which is sufficiently conspicuous when a Tooth is cut longitudinally in the Middle; on which Occasion we observe, that all the Roots of the Teeth are furnish'd with their peculiar Cavity, which is very considerable in the Base of the Tooth itself, or that Part of it which appears without the Gums; for, in the Cavities of the Teeth of every Animal, there is always found a certain mucous, membranaceous Substance, or a certain small mucous Cord, in the Form of an oblong Bladder, compos'd of highly slender Blood-vessels, nervous Membranes, and a certain glutinous Substance. This also reaches to the very Extremities of the Teeth; where its Membranes being more contracted, it appears somewhat harder and redder. In Fœtuses and Children, this Cavity is sufficiently large; and, according to *Eustachius*, in his Treatise *de Dentibus*, divided till the seventh Year of their Age, like Honey-combs; but it is smaller in Adults. In Children, this Cavity is fill'd with a mucous Matter, surrounded with a Membrane, whose external Surface is reddish, but internally it appears more white; and the Mucus itself, being the genuine Nourishment of the Teeth, is, at last, converted into their Substance; for we observe, that the more solid and firm the Substance of the Teeth becomes, as in Adults, the smaller Quantity of this Mucus is found; whereas in Infants, whose Teeth consist of small and tender Laminæ, a larger Quantity of it is observable. In the Teeth of Calves, especially what is call'd the *Secret Tooth*, this Matter may be commodiously seen with the naked Eye. In its Surface some Traces of Blood discover themselves by a reddish Colour; and, when the mucous Matter is compress'd, it actually discharges Blood.

It is of great Importance carefully to investigate the Formation and Generation of the Teeth. First, then, we must observe, that all Teeth, as well as the other Parts of the Body, have their Rudiments, and are form'd in the Womb; for the Evidence of Sense must, in this Case, as well as all others, be superior to the imaginary Force of any Arguments that can be brought to the contrary. *Eustachius*, in his Treatise *de Dentibus*, informs us, that upon dividing the Jaw-bones, not only of Abortives, but also of Children brought into the World at the due Period, he found the *Dentes incisores*, the *Canini*, and the three *Molares* as yet soft, distinguish'd by a small bony Interstice, and each having a mucous and tenacious Follicle, perforated at its Extremity, from which the Tooth proceeds. When these are skillfully separated, another small and latent Order of Teeth appears, which is, as it were, a Reserve of another Set, to succeed the Row which first appears, and is afterwards shed; and *Vesalius*, in the eleventh Chapter of his first Book *de Corpore humano*, affirms, that he has found the *Dentes Sapiientiæ* in Persons who have died before these Teeth appear'd. *Columbus*, also, in the tenth Chapter of his first Book informs us, that in Abortives of seven or eight Months, as also in new-born Children, he found the several Teeth contain'd in their respective Sockets. From what has been said, 'tis obvious, that no new Teeth are produc'd upon the Shedding of the old; but that such as were before latent and conceal'd, appear in their stead. Hence it happens, that Men advanc'd in Years have Teeth appearing sometimes



sometimes with a very intense Pain, and sometimes with none at all. It is remarkable, that in Fœtuses the *Dentes incisores* are, more conspicuously than the rest, furnish'd with a white and pretty solid Lamina; the *Dentes Canini* with one more slender, and less solid; and the *Molares* with one, which is highly slender, and almost cartaceous. For this Reason it is not to be wonder'd at, if some have their complete Number of Teeth sooner than others; and if they are distinguish'd, in the Order of their Appearance, in the same Manner with their Rudiments, whilst inclos'd in the Womb. But generally the *Dentes incisores* appear first, sometimes in the seventh, sometimes in the tenth, and sometimes after the twelfth Month; the *Dentes Canini* in the ninth or tenth Month; and the *Maxillares* some time or other, either in the first or second Year. Sometimes, also, the inferior Teeth appear sooner than the superior; and, at other times, the latter sooner than the former. Ten generally are shed of each Jaw-bone, about the fourth, fifth, or sixth Year; that is, the *Dentes Incisores*, the two *Dentes Canini*, and the four *Dentes Maxillares*: But the succeeding Teeth generally appear, either about the seventh or the fourteenth Year.

We have already observ'd, that the Matter, which supplies the Teeth with Nourishment, is of a mucous Nature. This Matter is found not only in the Teeth of Children, but more conspicuously in those of Fœtuses and Abortives; in which three Parts occur, that is, first, A membranous, or rather a mucous Follicle, including the whole Tooth, without Difficulty separated from it, and perforated at the Base, as well as the Root. Secondly, The Root, which is mucous, pellucid, abounding with Vessels, discharging Drops of Blood, when compress'd, furnish'd with a considerable Cavity, and, in Process of Time, gradually ossifying from the Circumference to the Centre; but, in such a Manner, that a small Cavity always remains. Thirdly, The Base itself, which appears like a white, tender, and excavated Lamina. This mucous and glutinous Matter is the true genuine Nourishment of the Teeth, by which they grow, are extended, and acquire a proper Degree of Solidity. That the Solids are produced by the Fluids, is confirm'd by Experience. This is also obvious from the most solid Bones of the Body, which are form'd of the terrestrial, though fluid, Juices of the Blood; and that, in subterraneous Vaults, Stones are form'd of dropping Waters, is a Phenomenon well enough known to the Curious. I myself have found by Experiments, that common Water, by the Effusion of any petrifying Liquor, has a Part of it been indurated, and, in Process of Time, converted into a Stone. In like manner, 'tis not to be doubted, but this mucous Matter, contained in the Teeth, is converted into their bony Substance. The chymical Analysis of the Teeth is an additional Proof of this; for, by *Papin's* Digestor, now much improved, not only all the Bones, but also the Teeth, may be soften'd and resolv'd into a gelatinous Juice, whilst there remains a certain terrestrial and mucous Substance; by which means the Elements or Principles of the Bones may be clearly discovered: For, 'tis certain, that these, as well as the other Solids, are made up of a terrestrial, thick, and gelatinous Juice; whereas the softer Parts, such as the fibrous, for Instance, are form'd of a more fluid and gelatinous Humour, into which all muscular Flesh is resolv'd in the above-mentioned Machine. The mucous Matter, which nourishes the Teeth, is derived from the Blood, and is conveyed through their Pores by small Ramifications of Arteries, arising from the external Carotid. We have already observed, that this mucous Matter, found in the Teeth, is contained in a pretty strong Membrane, in which there appear Vessels which bring the Blood to it, and convey it back. But the high red Colour of this Membrane appears most conspicuously in the lower Parts of the Cavities of the Teeth of Animals. Hence the Reason is obvious, why frequently a bloody Serum drops, or may be suck'd, from a carious Tooth; which is an infallible Proof, that the Blood-vessels penetrate into the Cavities of the Teeth. In my Opinion, therefore, a pellucid lymphatic Juice oozes through the Pores of the small Arteries, stops in the Cavity of the Membrane, and is gradually concreted; because the lymphatic Vessels, entering the Cavities of the Teeth, according to *Schenckius*, absorb, and carry back the thinner and more liquid Part, whilst that which is thicker, and more fit for Concretion, remains, and, by a continued Secretion of its thinner Parts, becomes solid; first, on the Surface and Circumference; and fresh Juices being pour'd into its Interstices, it gradually acquires a greater Degree of Solidity; for the bony Parts of the Teeth are nourished by the Juices conveyed through the Pores. We are convinced, that Bones are nourished; because, in Process of Time, Tendons and Cartilages are ossified, and the soft Bones of Children at last become hard. Besides, the Juice, oozing from broken Bones, is easily concreted, and contributes to the Generation of a Callus. We may therefore affirm, that Bones are not only increased to their just and stated Bulk, but also that they are nourished till old Age, by a fresh Accession of nutritive Matter through the Blood-vessels: And this is the Reason why, by an

Accession of new Matter, the Teeth of Children, being gradually enlarged, at last appear without the Gums. The Teeth are continually nourished and increased; otherwise they would soon be worn away by the Attrition requisite in Mastication. They are, therefore, increased in proportion as they are worn away by this Attrition. And, when the Teeth are wanting, or fall out, the Juice destin'd for their Nutrition is conveyed into the empty Socket, and fills it with a bony Substance, the Flesh of the Gums being at the same time render'd harder, that it may, in some measure, supply the Place of the Teeth.

Having thus consider'd the Generation and Nutrition of the Teeth, it now remains, that we explain in what manner they are possessed of Sensation, or a Power of Feeling. The Teeth, then, are vested with this Power, not as they are bony Substances, for 'tis absurd to ascribe Sensation to Bones so hard, that they will scarcely yield to the Impressions of Fire or Steel, but because, through the minute Pores of the Roots of each Tooth, which, in adult Persons, are scarcely conspicuous, particularly in the *Incisores*, and the *Canini*, but sufficiently observable in larger Animals, there are small Nerves, arising from the fifth Pair, conveyed. These small Nerves, being wrapt up with the Blood-vessels by means of a Membrane, run under the Teeth, and enter their Cavities. On account of these minute, but highly sensible nervous Ramifications, 'tis highly probable, that the Teeth are possessed of their sensitive Faculty. The all-wise Author of Nature knew, that, as the Teeth were naked and uncovered, they were frequently exposed to various Accidents, Corrosions, and Fractures; for which Reason, that they might be longer nourished and increased, he furnished them with Nerves appropriated for an Influx of the Spirits, and, consequently, for their Accretion and Nutrition. The Nerves distributed through the superior and inferior Jaw, and inserted in the Teeth, arise from the fifth Pair; for this Nerve is distributed into various Ramifications, the principal of which are, the Ramus Ophthalmicus, which, entering the Orbit of the Eye, distributes its small Ramifications to the Tunica Adnata; to the Glandula Lacrymalis, to the Eye-lids, to the Muscles which draw the Nose upwards, and to the Muscles of the Forehead. The thicker and interior Branch of the Ramus Ophthalmicus, by passing through a particular Hole in the Orbit, and entering the Cranium, just by the Crista Galli, penetrates the Dura Mater; and then emerging from the Cranium, and passing through a Hole in the Os Cribriforme, it enters the Nose, and is distributed through its Membrane. Another maxillary Branch of the fifth Pair, through a third Hole, emerges from the Cranium, conspicuous in several small Ramifications; the first of which, after it has distributed Branches to the Masseter Muscle, to the Flesh of the Gums, and to the Roots of the Teeth of the upper Jaw, through small Holes, sufficiently conspicuous in their posterior Parts, enters a particular Sinus of the Bone, which constitutes the inferior Part of the Orbit: And, as soon as it emerges from the Perforation, lying under the Orbit, it is sometimes divided into three, and sometimes into four Ramifications, which distribute small Branches to the Integuments of both Sides of the Face, to the superior Lip, to the Muscle which draws the inferior Part of the Nose to one Side, as also to the internal Muscle of the Nose. Another Branch, running almost directly downwards about the posterior Region of the Duets, which go to the Fauces, is divided into two Branches; the superior of which is distributed to the Membrana Pituitaria, which lines the internal Parts of the sphenoidal, ethmoidal, frontal, and maxillary Sinuses. The inferior Branch, emerging from a peculiar Perforation in the *Os Palati*, passes through the spongyous Flesh lying under the *Ossa Palati*, where, in my Opinion, the small nervous Ramifications enter the anterior Teeth of the superior Jaw. The third maxillary Branch, commonly call'd the *Ramus Inferior*, or *Gustatorius*, emerges through a fifth Foramen on both Sides, and is divided into three Ramifications; the first and interior of which is inserted into both Sides of the Tongue, a little above its Root; and passes through the Middle of the Tongue, and the maxillary Glands. The second Ramification enters a Sinus excavated in the Bone of the lower Jaw, where it sends off several nervous Fibres, which penetrate the Roots of the Teeth; and, when this Nerve reaches the Root of the fifth of the *Dentes Molares*, it emerges through a Perforation in the anterior Part of the Jaw-bone, and is distributed to the Lip, and its Muscles. The third Branch of this large Ramification enters the Parotid Glands, and terminates in them. From this Distribution, or Ramification, of the fifth Pair, we can easily account, why the Teeth should, by Consent, affect other Parts; and why Medicines, applied to the Nose, the Temples, and posterior Part of the inferior Jaw-bone, are of singular Efficacy in removing the Tooth-ach.

As to the Number, Bulk, Figure, and Office, of the Teeth, they are generally thirty-two in Number, sixteen in each Row; but Women have only fourteen, for the most part. Nature has bountifully bestowed on the human Species a large Number of Teeth, so disposed, that in each Jaw-bone there



is a Row appointed for attenuating the Aliments, and preparing them for Chylification. Some are of Opinion, that the Length or Shortness of Life may be determined from the greater or smaller Number of the Teeth; for *Hippocrates*, long ago, observed, in the sixth Section of the sixth Book of his *Epidemics*, "That those who were furnish'd with a large Number of Teeth, liv'd to a great Age." And *Bartholine*, in his *Institut. Anatomic.* uses the following Words; "The Fewness of the Teeth is a Sign both of a Penury of nutritive Matter, and a weak productive or forming Force; or it is the Cause why the Aliments cannot be sufficiently prepared, by which means both the first and second Concoctions are vitiated." The Number of the Teeth is not only considerably large, but they are also separate, that they may not, at the Time appointed for their Shedding, come out of their Sockets all at once, which would create an intolerable Pain. Besides, by this Contrivance, it happens, that when one ceases to perform its Office, it may be easily removed, without injuring the adjacent Teeth; which could not happen, if the Teeth consisted of one continued Bone; for, in this Case, if one Part of it was injured, the Disorder would easily be communicated to the Whole. The Teeth, in Mankind, are of a middle Size. From their Figure and Office, they have different Names bestowed upon them. The four anterior Teeth in each Row are call'd *Dentes Incisores*. These are broad and sharp, that they may the more speedily divide the Aliments in Mastication. They are also call'd *Dentes Risorii*, because in laughing they are more discovered than the others. They are also call'd *Dentes Laſei*, because they appear first. These are succeeded by two in each Jaw, call'd the *Canini*, which lie next to the Incisores, have a large Base, and a long Root. They are call'd *Canini*, because in Shape they resemble the correspondent Teeth in Dogs. They are by some call'd *Dentes Oculares*, because the pulling them out is generally thought to prove injurious to the Eyes. But Anatomists are not agreed with respect to the Cause of this Phenomenon. Some are of Opinion, that their large Roots are extended to the Orbit of the Eye; whereas they scarce reach to the lower Part of the Nostrils. Others affirm, that the Nerve, which comes from the inferior Orbit of the Eye, and passes through the Perforation of the Jaw-bone, is in some measure propagated to these Teeth; which Opinion seems to be somewhat more probable; but, because the *Dentes Canini* of the inferior Jaw receive no Portion of this Nerve, they cannot, for this Reason, be called *Oculares*. After these arise the five maxillary or grinding Teeth on each Side. These have their Points rough, broad, and unequal, that they may sufficiently triturate what is cut and broken by the *Incisores* and *Canini*. Sometimes on both Sides there appear five of the Molares, and sometimes only four; sometimes four on the Left Side, and five on the Right; or five on the Left, and four on the Right; or four in the lower, and five in the upper Jaw: Which Difference is generally produced by the last Teeth, which are by some call'd *Genuini*; though *Cicero* call'd the *Molares* by that Name. These are the Teeth which appear after Puberty, and the Use of Venery, sometimes with intolerable Pain. Physicians, little adverting to this Circumstance, either pull out other Teeth, or, imagining they are pain'd by a Peccancy of the Humours, order large Numbers of Medicines and Applications for removing the Pain; which, without creating any additional Pain, might be more effectually and speedily done by a gentle Scarification of the Gums about the last Tooth, or even a slight Penetration of the Jaw-bone; As I myself have experienced, says *Vesalius*, when my thirty-second Tooth began to grow out in the twenty-sixth Year of my Age. As for the Colour of the Teeth, the whiter they are, so much the better, and the surer Sign of their Soundness. Their Whiteness is injured by Neglect, by old Age, and by Diseases. *Ferbeyen*, in his Anatomy, affirms, that the yellow or black Colour of the Teeth is preternatural, and ordinarily produced by Corruption. The Teeth are generally pretty white till about the thirtieth Year of one's Age, after which they begin to assume a yellowish Colour, which is gradually heighten'd in proportion as the Person advances in Years. But the Teeth are never deprived of their white Colour, except by some preternatural Cause; and *Helmont* informs us, that Peoples Ages may be determined by the Colour of their Teeth. This Colour also varies according to different Climates. Thus, the Inhabitants of the Eastern Countries have whiter Teeth than those of the more Northerly Climates. The *Egyptians* and *Ethiopians* excel all others in this respect: Of this *Helmont* takes notice, as also *Petrus Johannes Faber*; and *Prosper Alpinus*, in his *Treatise de Medicina Egyptiorum*, informs us, that the Teeth of the *Egyptians* are always sound and vigorous, free from Caries and Pain.

All the Teeth, without Exception, are so firmly fixed in their Sockets, like so many Wedges, by that Species of Articulation call'd *Gomphosis*, that they remain steady and immovable in Mastication. Besides, the Teeth are not all fix'd into their Sockets by an equal Number of Roots; for the *Incisores*

are only secured by one. The *Canini* have also but one, which, however, is deeper than those of the *Incisores*, and larger in Proportion to the Strength of the *Canini*. And among the *Incisores*, the two in the Middle are secured by deeper Roots than the two lateral ones contiguous to the *Canini*, because they are broader and larger. The *Dentes Molares* differ from each other with respect to their Roots. The superior, and especially the two posterior, are sometimes fixed with three Roots. But the inferior have only two, partly because the Substance of the superior Jaw is softer, and less compact, than that of the inferior; for which Reason, they could not be so securely fixed by two, as by three Roots; and partly, because the inferior press upon their Roots by their own Weight; whereas the superior are pendulous, and consequently require more Roots to secure them. The other *Dentes Molares*, succeeding the *Dens Caninus*, in the upper Jaw, have two Roots, and those in the inferior only one. Besides, 'tis to be observ'd, that the Teeth of Children are only furnished with imperfect, soft, and, as it were, medullary Roots. Hence they are generally loose, especially the Incisores, which may be pulled out with one's Nails, or by a Piece of Thread twisted about them. It is also to be observed, that the Roots of the Teeth are internally surrounded with membranous and nervous Ligaments, by which the Teeth are firmly secured in their Sockets; and externally the Teeth are encompassed by the Substance of the Gums, which are a kind of hard Flesh, consisting of small fibrous Laminæ plac'd close to each other, and intermix'd with a large Number of Blood-vessels; for which Reason they are intensely red. They are, besides, liberally furnished with slender Membranes, Glands, and Ramifications of Nerves: Hence they derive their Power of Sensation, and are observed to be moisten'd with a due Humidity. This Flesh surrounds the Teeth like a Rampart, and fortifies them as Muscles do. Hence, when it is either eat away, or become preternaturally flaccid, the Teeth generally become loose, or drop out. But the Membrane which surrounds the Roots of the Teeth, and that Part of them which is cover'd, as *Clopton Havers*, in his Osteology, justly observes, is not a Continuation of the maxillary Periosteum, but rather a Propagation of that Membrane which is contiguous to the Gums, and is common to the whole Mouth, which is really glandular, and which does not terminate with the Gums, but, as soon as it arrives at their Margins, is intorted and reflected betwixt the Inside of the Gum and the Tooth: But it descends into the Sockets, and adheres immediately to those Parts of the Teeth, which are lodg'd in them. From the Root of some Teeth, especially those in the upper Jaw, together with this Membrane, there is something of a hard and fleshy Nature communicated to the Substance of the Gums, by which the Teeth are the more securely fixed in their Sockets. And, though the Teeth themselves do not partake of the common Periosteum, yet their Sockets are furnish'd with it, and it so coalesces and unites with the Membrane which covers the Teeth, that they seem to form but one and the same Body.

But 'tis necessary to observe still something more with respect to the Use of the Teeth. We took notice, above, that they contributed not only to the Mastication of the Aliments, but also to the Formation of the Voice. But their principal Use is Mastication, or the incising, breaking, and dividing the solid Aliments, to which all the Teeth are requisite; and, for this Reason, they have always been esteem'd highly valuable Parts of the Body. *Morbius*, in his *Fundament. Med. Cap. 9.* beautifully shews, that God, under the *Mosaic* Dispensation, not only ordered the Servants who had their Teeth broken or beat out by their Masters, to be manumitted, and set at Liberty, but also that the Antients, in the Temple of *Apollo*, suspended a leaden Instrument for drawing Teeth; intimating, that the Teeth were never to be pulled out, except they were so loose and carious, that they would yield to a leaden Instrument.

The *Turks*, in like manner, according to *Menavius*, in *Lib. 3. Cap. 22.* durst never attempt the Extraction of a Tooth, till they had first obtain'd the Sovereign's Licence. The secondary and less immediate Use of the Teeth, is the Articulation of the Voice, since they are wisely placed as a kind of Rampart to the Tongue, and reflux Air. Hence Infants, who have as yet got no Teeth, utter indistinct and inarticulate Sounds; those who have two or three, lisp out broken Words; and such as are furnish'd with more, speak with proportionably more Distinctness; and Adults, who have lost some of their Teeth, have their Voice and Speech injur'd by that unlucky Circumstance. Besides these two Uses, the Teeth also contribute to Ornament; for the Face is considerably deform'd, when the fore Teeth are wanting. Hence some Inhabitants of the *East Indies* act a foolish Part, who, for the sake of additional Graces, pull out their fore Teeth, as we learn from *Hieronymus Benzo*. Black and carious Teeth are also accounted a Deformity.

Having thus consider'd the Teeth in their natural State, and inquired into their Substance; the Manner of their Generation;



tion ; the Methods in which they are nourish'd ; whence they derive their Power of Sensation ; and by what means they are secured in their respective Sockets ; we are the more easily enabled to discover the Indispositions and Misfortunes to which they are subject, and to remove their Causes, whether direct and immediate, or of the more remote and secondary Kind.

But, because we at present intend to take an accurate Survey of the Pathology of the Teeth, we shall divide the Disorders, incident to them, into such as are accompanied with Pain ; such as are free from it ; such as proceed from a depraved Nutrition ; or from a Weakness and Fault of the Nerves, Ligaments, and Gums, contiguous to the Teeth. But we shall first consider that most general Disorder arising from the Substance of the Teeth ; which is, a Caries or Corrosion. This is often succeeded, not only by a violent Pain and Mutilation, but also frequently by a putrid Stench, a Production of Vermin, and a Generation of Fistulas. A Caries of the Teeth draws its Origin principally from an internal Cause, whilst the gelatinous Mucus, which fills the Cavity of the Teeth, by means of an impure scorbutic Lymph, is impregnated with a corroding and saltish Acrimony. Hence the adjacent Flesh is, by the impure saline Lymph, destroy'd, corroded, and filled with small Ulcers. The Tooth itself also, in consequence of its peccant Nourishment, is soften'd, corroded, and gradually destroyed. But that all the Teeth do not suffer in this respect from the corrupted Lymph, seems to be owing to a Weakness of the Vessels, of which particular Teeth consist, or to some external Cause, which does not act upon such as remain sound ; for a Caries generally begins on the external Side of the Teeth, by a small black Speck or Hole, especially in the maxillary Teeth, which are broad, and which, in Process of Time, when the cortical Substance is removed, acquire Cavities in the Middle, in which some Parts of the Aliments remaining, and becoming acrid by their Continuance, by their putrid intestine Motion, easily excavate, and dissolve the bony Substance of the Teeth. But as soon as, in any Part, there is a Cavity, or empty Space, form'd, there is forthwith a larger Influx and Accession of Moisture invited to it from the internal Parts ; by which means the Tooth is gradually consumed, and falls off by Bits. This Misfortune happens to the fore Teeth, without any previous Excavation ; for the carious Portions, not finding a free Discharge, like so many Wedges, forthwith burst their Sides.

When the Sanies of a carious Tooth cannot be freely enough discharged thro' a narrow Perforation, but is lodged near the Roots, and attacks the Sockets and Jaw-bones themselves, a Fistula is produced ; though, at the same time, this Misfortune does not always draw its Origin from the carious Tooth, but more frequently begins in the Jaw-bone, terminates in the Tooth, and renders it carious. *Zwingerus*, in *M. N. C. Dec. 2. a. 7. Obs. 233.* gives us an Account of such a Fistula produced by a carious Tooth ; and the Fistula, in its Turn, render'd several Teeth carious. When the Teeth are excavated, a highly fetid Stench succeeds ; and this proceeds from the cadaverous Sanies of the carious Tooth, which again draws its Origin from the Remains of the Aliments contracting a putrid Quality in the Cavity ; for the salino-sulphureous Sanies of the Tooth, in consequence of its violent intestine Motion, acts upon the Remains of the Aliments, by dissolving the Union of their component Parts. Hence a Putrefaction is produced, which is nothing but a Dissolution of the Elements, or constituent Principles, of Bodies, by means of a violent intestine Motion ; and this intestine Motion is always accompanied with a fetid Stench, arising from the Evaporation and Flying off of the minute salino-sulphureous Particles. When such a fetid Putrefaction of the Teeth happens, Vermin are generally observ'd to be produced ; for nothing more directly and immediately contributes to the Production of these, than an intestine putrid Motion, which actuates the Seeds of these Insects, vivifies them, nourishes them, and, by its expansive Force, soon excludes them. Now, as there is no Part of the human Body, in which Worms may not be generated, as we may see in *Forssk., Lib. 14.* and in other Authors, so there is no Reason to doubt of the Possibility of their being form'd in the Teeth, since we daily eat Aliments contaminated with the Seed of some Worms or Insects. This is also confirm'd by Experience, since, upon breaking carious Teeth when extract'd, Worms have been taken from them.

From a peccant Nourishment proceed those Concretions about the Teeth and Gums, which are commonly call'd the Tartar of the Teeth. *Helmont* is of Opinion, that the Gums supply the Teeth with Nourishment ; and that, when this nutritive Juice is become excrementitious, and discharged from the injured Gums, it indurates about the Teeth, and assumes a Degree of Hardness almost equal to their own. But, in my Opinion, the tartareous Matter, adhering to the Teeth, is produced partly from the Saliva impregnated with terrestrial, tartareous, and viscid Parts, and partly from the impure tartareous Lymph of the Gums, which, by continually moistening the Teeth, gradually adds viscid and tartareous Particles to them.

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This Tartar, in consequence of its Acrimony, gradually consumes the Substance of the Teeth, induces a Blackness, and sometimes a Caries. This tartareous Substance is instantaneously resolv'd by being rubbed with Spirit of Salt, which is a Proof, that it consists of an alkaline Earth. This Disorder is generally most incident to Infants, and Children, who feed upon viscid Preparations of Milk and Sweet-meats, as also to scorbutic, arthritic, nephritic, and hypochondriac Patients ; because their Serum abounds with impure, terrestrial, and tartareous Parts. For this Reason, I think, Physicians ought carefully to inspect the Teeth, because, by their State, that of the Serum and Lymph are most satisfactorily discovered.

We now come to consider those Disorders of the Teeth, which proceed from any Fault or Weakness of the Nerves : And the first of these we shall mention, is that severe Pain perceived not only in the Substance of the Teeth, but also in the Gums, and adjacent Parts, and sometimes thro' the entire Jaw-bone ; for 'tis sufficiently known from physiological Observations, that a slender Membrane, furnished with an exquisite Power of Sensation, is dispersed through the Cavities of the Teeth ; as also, that the Gums, the Sockets, and the Roots of the Teeth, are immediately surrounded by a nervous Coat. When therefore the Sanies of a carious Tooth preys upon the membranous Fibres contained in the medullary Substance of the Tooth, a most intense Pain is excited. Hence we find, from daily Experience, that a Tooth-ach is rarely excited, unless when the Teeth are carious ; for the Humours conveyed to the Jaw-bones act principally upon those Teeth, which are carious or corroded. Sometimes, whilst the Teeth are sound and entire, this Pain appears with a Redness and Swelling of the Parts, a Pulsation of the small Arteries, a Redness of the Face, a continual Driveling of the Saliva, a preternatural Heat, a feverish Commotion of the Blood, and a continual Watching ; all which Symptoms discover a sort of arthritic Disposition of the Teeth, and an Inflammation of the adjacent Parts. This Disorder most frequently seizes plethoric and scorbutic Patients, Women whose Menses are obstructed, and Men whose accustomed Discharges of Blood from the hæmorrhoidal Veins are suppressed, as also those who neglect Venesection at the stated Time they have been used to it. Hence pregnant Women, on account of their plethoric State, with which a Cacochymia is often join'd, are highly obnoxious to this Disorder ; for it is produced by a Defluxion of acrid Humours stagnating about the Roots, the Gums, and Membranes of the Teeth. It is sometimes accompanied with an Erysipelas, which affects the external Integuments of the Face, the subjacent Muscles, and the Parotid Glands, and is accompanied with a Pain of the Teeth ; because, by a spasmodic Constriction of the Parts, it draws their Nerves into Consent. Besides, 'tis well known, that the Antients distinguished Tooth-achs into such as proceeded from a hot, and such as arose from a cold Cause ; which Distinction, when rightly explained, may be safely admitted. The Tooth-ach, arising from a hot Cause, is that, which is accompanied with intense and preternatural Heat in sanguine, plethoric, and choleric Patients, or such as are in the Vigour of Youth or Manhood, which seizes with a violent Fever, and other terrible Symptoms, such as a Redness of the Face, and a turgid State of the Vessels. A Tooth-ach, on the contrary, may be said to proceed from a cold Cause, when it attacks Persons of cachectic Habits, Patients abounding with Serum, old Men and Women, and is accompanied with a Paleness of the Countenance, a Weakness of the Pulse, and œdematous Swelling of the Parts. And in general we are to observe, that, when a Tooth-ach proceeds from a hot Cause, the Pain is very intense, but not durable ; whereas, when it proceeds from a cold Cause, the Pain is generally less intense, tho' more lasting. We must also observe, that a Tooth-ach, proceeding from a carious Tooth, is more constant than the other Kinds, tho' it may be aggravated by many Accidents both external and internal. But that Species of the Disorder, which is of the inflammatory Kind, proceeds from a Defluxion of acrid and viscid Humours, and generally seizes arthritic, rheumatic, hypochondriac, and plethoric Patients, and such as have their accustomed Discharges of Blood from the Nose obstructed, accompanied with a feverish Horror, a heavy Pain of the Head, a Weakness of the Body, and a Distention of the Face, and that at certain Periods, and is terminated at stated Times. This Species of the Disorder, with respect to its seizing the Patient, its Causes, its Symptoms, and its Method of Cure, has something analogous to the Erysipelas, the Gout, arthritic Disorders, and the Rheumatism ; for, in all these, there is an inflammatory Congestion of Serum or Blood, accompanied with spasmodic Pains, Swelling, Redness, Heat, and Pulsation ; and this Congestion requires a due Diffipation and Resolution.

Nor must we forget that Species of Tooth-ach arising from the Eruption of Teeth in Infants and Children, especially when the *Dentes Canini*, which are harder and sharper than the other Teeth, force their Passage through the Flesh of the Gums ; for these, in making their Appearance, more severely afflict the tender Patients, because they act with greater Sharpness upon the



Gums than the *Molares*, which are larger, and more obtuse. The sole Cause of the Pain is the Breaking, Tearing, and Irritation of the Flesh of the Gums, which is composed of various Fibres, Nerves, and Membranes. From this Irritation the Pain proceeds; and from the Pain, which is always accompanied with Spasms, and an impetuous Commotion of the animal Spirits through the whole nervous System, arise those tormenting and severe Symptoms generally incident to Children during Dentition, and which are, by *Hippocrates*, enumerated in the twenty-fifth Aphorism of his third Section, in the following Words: "When Children begin to breed Teeth, they are "afflicted with Itchings and pricking Pains of the Gums, "Fevers, Convulsions, and Fluxes of the Belly, especially "when they breed their Canine Teeth. But these Symptoms "most remarkably afflict Children, that are gross, fat, and "costive." To these are also frequently added Watchings, Vomitings, frequent Discharges of the Saliva, Asthmas, and Coughs; and generally these Symptoms, as also the Convulsions, are more violent, the greater the Disposition is to them from the Birth. A sickly or pregnant Nurse, Milk coagulated in the Stomach, or tending to an acid and fordid Putrefaction, hot Gruels, an Admission of cold Air, the sudden Disappearance of Ulcers or exanthematous Efflorescences in the Head, or any other Parts, and the Presence of Worms in the Intestines, give also frequent Occasions to the Exasperation of these Disorders of the Teeth.

We now come to consider those Disorders of the Teeth, which arise from any Fault or Resolution of the Nerves, and a lax or flaccid State of the Ligaments. The first of these we shall mention, is what we commonly call Instability of the Teeth: Now, Teeth may be loose, either in consequence of some Fault of their own, or some Imperfection in the Gums. With respect to the former, the direct and immediate Cause of their Looseness is the Laxity, the Flaccidity, the Corrosion, and Rupture, of their proper Ligaments. With respect to the latter, the Gums may be in the Fault, either when they are entirely relaxed, and eaten away, or only in part thus affected, attended with a Discharge either of pure, or, as it frequently happens, putrid and corrupted Blood.

The Ligaments of the Teeth are rendered lax and flaccid, first, by means of Narcotics, Opiates, Ointment of Henbane, and other Substances of the like Qualities; an Instance of which we have in *M. N. C. Dec. 2. an. 2.* Secondly, by external Violence, such as Falls, Blows, the strong Application of hard Bodies, and Filips; and this is so much the more dangerous in the Fore-teeth, because, on account of their single Root, they are easily loosened; and the *Incisores*, in a particular manner, are not deep fixed in their Sockets. To this external Violence belongs the Biting of hard Substances, such as the Cracking the Stones of Cherries and Prunes between the Teeth. Thirdly, the Ligaments of the Teeth may be rendered lax and flaccid by Convulsions; for Instance, in those Shatterings and Collisions of the Teeth, to which Children are subject. Fourthly, the Ligaments of the Teeth may be rendered lax and flaccid from a Defect of Nourishment in Persons recovering from a Disorder, and sometimes in old People. These Ligaments of the Teeth may be also corroded and mortified by any thing of an acrid and corrosive Nature, whether Tartar, a Caries, a Scurvy, or the Remains of Mercury. Thus *Eustachius*, in his Treatise *de Dentibus*, informs us, that he often found, in the Sockets of the Teeth, such a large Collection of tartareous Matter, arising from Defluxions to which they are subject, which *Ettmuller* takes for Tops of the Teeth, that it rendered the Ligaments lax, and at last thrust out the Teeth. In a legitimate Scurvy, a foreign and adventitious Acrimony, convey'd from the corroded Gums to the Roots and Ligaments, also induces this Corrosion. Mercury is highly prejudicial to a firm and fixed State of the Teeth; for this Substance, where-ever it finds Pores, which, on account of its Subtlety, it will do in very compact Bodies, insinuates itself into them, and begins to act as a Corrosive; for which Reason it is principally injurious to the Nerves and Ligaments. This seems to be confirm'd by an Observation made by Mr. Boyle, in the sixth Chapter of his Treatise *de Poris*; where we are told, that this Author, after a mercurial Uction, found a small Drop of Mercury in the Socket of a Tooth, which was the Occasion of its falling out. The same Effect is also produced by cosmetic Waters impregnated with Mercury; Instances of which occur in *Forestus* and *Ettmuller*. By external Violence, if not all, yet, at least, so many of the Ligaments may be broken, that the Tooth may only remain slightly fixed in its Socket; and this Effect may be produced, either by Attempts to extract the Tooth, or by a Blow, or by a Fall. As for the Gums, their Tone is generally weakened, either when the Tooth-ach ceases, because, being before inflam'd, they were, of course, turgid; for all inflam'd Flesh afterwards becomes flaccid; or after a Salivation, the Gums not being previously ruptur'd, but only rendered lax. A Solution of the Unity of the Gums is produced in a simple Discharge of Blood, if the Saliva is impregnated with an acrid Taint, either of the simple or scorbutic Kind, which raises their Flesh

into a spongy Kind of Tumor. Hence the Gums, when gently touched, are broken, and discharge Blood. From what has been said, we may easily account, both for the Falling out, and the Want or Defect, of the Teeth. They fall out, either in consequence of their being excessively loose, or by the violent Application of some external Cause. But a Defect of the Teeth is, when, in consequence of Age, fresh ones do not succeed those, which are fallen out.

We now come to consider that Disorder of the Teeth, commonly call'd a *Stupor*; which is a certain kind of Pain, in which the Membrane surrounding the Teeth is, in some measure, deprived of Sensation. This is principally produced, either by taking some acid and austere Substance, or by throwing up, by Vomit, a Substance of the like Nature. Hence this Disorder is much incident to those hypochondriac Patients, whose Disorder draws its Origin from an acid and austere Principle. As for a Chattering or Collision of the Teeth, it is a peculiar kind of Convulsion, arising from a reciprocal spasmodic Constriction of those Muscles, which are subservient to the Opening and Shutting of the Jaws; for these Muscles, when affected with such a Convulsion, induce such a Collision of the Teeth. The Causes of this Symptom are, whatever Things may contribute to produce Convulsions; intense Cold, for Instance, Pains produc'd by Worms, or a difficult Dentition, and a Suppression of the Menfes.

Having now considered the various Disorders of the Teeth, and investigated their several Causes, it remains, that we point out the most proper Methods of curing each of them, and specify the several Remedies best calculated for removing their Causes. The first then we shall take under our Consideration, is a Caries of the Teeth, or a Destruction and Corruption of them by a sanious Matter. In treating this Disorder, we are to observe, that a Caries, a Corruption, or Mortification, of the Teeth can by no means be repaired; for what is corrupted and mortified, as we observe in a Sphacelus, can by no Art be restored to a sound and live State; for what a sphacelous Putrefaction and Corruption is in Flesh, or the muscular Parts of the Body, the same is a Caries or Rottiness in the Bones. We are, however, in the Beginning, to use our utmost Efforts to hinder this Disorder, which is at first pretty gentle, and confined to a narrow Space, from spreading the Contagion through the Whole of the Tooth; for, when a Caries once begins in a Tooth, by means of the Putrefaction, which quickly spreads itself, especially if a free Access is given to the Air, that heavy and penetrating Body, which is continually in an intestine Motion, it does not stop, till it has consumed the entire Tooth. 'Tis, besides, observable, that a Caries, after having consum'd one Tooth, sometimes attacks the next to it. To this spreading Corruption a Stop is, therefore, to be speedily put. But all those Substances generally used with Success against a Caries of the other Bones, such as Euphorbium, Camphire, Oil of Scurvy-grass, and Cloves, are found ineffectual for this Purpose, partly because they cannot be commodiously applied, and partly because their Virtues are impaired by an Accession of the Aliments, and a continual Admixture of the Saliva. The most effectual Remedy I have found for preserving a Tooth, which is already excavated, and affected with a beginning Caries, is, to prepare small Portions of Lead, which exactly fit the Cavity, and carefully to thrust them into it. By this Method, I knew a Tooth preserved entire and sound for many Years; for, by the Lead, the Remains of the Aliment are hindered from entering the Cavity of the Tooth, where they degenerate into a fetid and putrid Substance, which not only farther preys upon the Substance of the Tooth, but also fills the whole Cavity of the Mouth with a noisome Smell. Besides, this Lead, by its alkaline Substance, temperates, corrects, and changes the cadaverous, acid, and acrid Sanies lodged in the Parts. In a Word, the Lead not only totally destroys the ulcerous Ferment, but, which is another considerable Advantage, prevents the free Access of the Air.

It is well known to Physicians, that none are afflicted with more severe and terrible Disorders of the Teeth, than those, who have the Misfortune to have them corroded and excavated; for since, by this means, a free Passage into them is already open, the Defluxion of acrid Serum more readily enters them, and, by irritating the nervous Membrane, which lines their Cavity, excites the most cruel Pains. To prevent the Pain of such a carious Tooth for the future, apply the actual Cautery, and, by its means, burn the internal nervous Membrane, which imparts Sensation to the Tooth. This Operation is performed without either Pain or Danger, with an Instrument made on purpose, as I myself, says *Hoffman*, and several others, on whom I have performed the Operation, can attest. After this, the Peace of Lead before-mentioned is to be thrust into the Cavity. *Forestus*, in his fourteenth Book, orders the Application of the actual Cautery thro' a Cannula, and defends the adjacent Teeth with Wax, or some other such Substance. *Scul-tetus*, in his *Arment. Chirurg.* describes an Instrument adapted to this Use. We are to observe in general, that, in this Case, the actual Cautery is preferable to all those of the potential Kind, such as Oil of Vitriol, Aqua-fortis, and the Caput Mortuum



tuum of Vitriol; for these destroy the Texture of the Teeth, and injure the Fauces; whereas the actual Cautery, by drying up the superfluous Humidity of the Tooth, and at the same time extinguishing the Ferment, produces two happy Effects at once.

As for the Extraction of the Teeth, we affirm, that it is sometimes not beneficial or necessary, sometimes highly dangerous, and sometimes absolutely necessary. Extraction then is of no manner of Service, when an Inflammation and Exulceration possess not only the Tooth and Gum, but all the adjacent Parts, in consequence of a Congestion of impure Humours; for when no Fault is to be discovered in the Tooth itself, then the Pain is by no means to be removed by Extraction. Nor is Extraction necessary in a Tooth-ach arising from a carious Tooth; because, as we have already observed, the Tooth may be preserved, and the Spreading of the Caries, together with the Pain arising from it, prevented, by a due Application of the actual Cautery. The Extraction of the *Dentes Canini* is a dangerous Operation; because they have a pretty long and broad Root, in which there is a Portion of that Nerve, which arises from the Perforation of the Orbit. Hence acute or inflammatory Pains of the Eyes, together with Head-achs, may be produced. This is confirm'd by a memorable Observation of *Higmore's*, in his *Disquisitiones Anatomicae*, Cap. 2. Besides, the Extraction of Teeth deep-seated in their Sockets, especially in plethoric and scorbutic Patients, in Women whose Menfes are about to flow, or in Patients labouring under a burning Fever, may be attended with large Hæmorrhages, which sometimes terminate in Death. Instances of this occur in *Higmore*, *Hollerius*, *Platerus*, and *Rousselier*. Neither is a Tooth to be extracted at the time a Patient labours under a violent Head-ach, or too large a Congestion of Blood to the Head; because then all the Parts being irritated, the Extraction of a Tooth must, of course, bring on the most formidable Symptoms. When a violent Hæmorrhage succeeds the Extraction of a Tooth, the *Caput Mortuum* of Vitriol must be applied. The Extraction also of the *Dentes Molares* is attended with considerable Danger, especially of the last but one, and third Tooth of the upper Jaw, not only because they are fix'd with three Fangs or Roots, and consequently capable of doing more Injury to the Flesh of the Gums, but also because, in extracting them, the Jaw-bone is easily shattered. For the Illustration and Confirmation of this, I shall present the Reader with the following Case: Some time ago, a Gentlewoman applying to me, says *Hoffman*, complained of a Fistula in that Part of her upper Jaw, in which the last Tooth but one had been fix'd, and which, on account of the Violence of the Pain with which she was afflicted, had been extracted about a Year before. From the very Time of the Extraction, the Patient told me, that she observed the Cavity, from which it was taken, was not consolidated; but that, from it, she had a perpetual Discharge of serous Matter into her Mouth. This Cavity received a Probe three Inches long; and when, for the sake of Consolidation, *Peruvian Balsam*, or any other Remedy of a penetrating Flavour, was applied to it, the Patient perceived it in her Nostrils, just as if it had been put into them externally. She also observed, that, when the Matter was not freely discharged from her Nose, the Effusion of serous Matter from this Cavity was increased; and, on the contrary, when the mucous Matter did not flow liberally from the Cavity, it was freely and copiously discharged from her Nostrils. She consulted the most celebrated Physicians and Surgeons of several Cities, who unanimously agreed, that the Disorder was a Fistula; and accordingly prescribed the Use of hot Baths, drying Decoctions prepared of proper Woods and Roots, as also Purgatives. Externally they also applied balsamic, vulnerary, and astringent Medicines, but without any happy Effect. The Surgeons were of Opinion, that an Incision should be made; but I cannot possibly comprehend which way they must have gone to Work. Whilst she was recounting these Circumstances, and imploring my Assistance for her Relief, I concluded, that it was not a Fistula; but that, by the violent Extraction of the Tooth, her upper Jaw-bone had been injur'd; and that the memorable Cavity, so accurately described by *Higmore*, which is furnished with a pretty strong pituitary Coat for the Secretion of the Mucus, and which communicates with the Nostrils, had been open'd. The Gentlewoman herself confirm'd me in my Opinion, when she told me, that there adher'd to the Root of the extracted Tooth a large Quantity of a solid Matter, resembling a Pumice-stone. I forthwith shew'd the Patient, in a Scull I had by me, how slender the Substance of the Bottom of the Socket, in which the last Tooth but one is fixed, was near that Sinus; in which manner, when this Substance was injured, the Probe might be introduc'd to the Orbit of the Eye; and how the Sinus itself terminated in the Nostrils. I therefore concluded, that a perfect Cure was impracticable, especially in a Woman pretty far advanced in Years; and that neither any Chirurgical Operation could be perform'd, nor any internal Medicine applied: For this Reason I only ordered, that the Cavity should be stop'd with a Piece of Lead, lest the Air, having a free Access to the Sinus, should

produce a greater Putrefaction and Corruption. Besides, I order'd her, at certain times, to draw up a proper Quantity of Balsamum Vitæ into her Nostrils; by following which Method she enjoys a good State of Health, and is free from all the Inconveniences which before attended her Disorder.

But the Extraction of the Tooth is necessary in Fistulas, whether they draw their Origin from the Rupture of an inflammatory Tumor of the Gums and Jaw, producing a Caries of the Tooth, or from not extracting, in due time, a putrid and carious Tooth, since, by Extraction alone, a free Discharge is procured for the sanious Matter. 'Tis absolutely necessary the Matter should be discharged in this Manner, since, by stagnating, it acquires a higher Degree of Acrimony, and a more corrosive Quality. It sometimes happens, that the Callus is extracted along with the Tooth, and a Discharge of Blood from the Fistula ensues; in which Case the Cure succeeds happily, as we find in *Sennertus*, *Lib. 2. Prax. Part 1. Forestus* also furnishes us with the Histories of several Fistulas, which have been cured: Thus, for Instance, in *Lib. 14. Obs. 17.* he describes two Fistulas of the Gums arising from carious Teeth. In the fifteenth Observation of the same Book he describes one arising from an Inflammation of the Gums, which render'd the Teeth carious; and, in the seventh Observation, he describes one of the external Parts, the virulent Matter of which was discharged on the Patient's Beard.

When carious and putrid Teeth afford a Lodging for Worms, an aking and corroding Pain is perceiv'd, and little or no Discharge of the Saliva is observ'd, as the learned *Forestus*, in the fourteenth Book of his *Observations*, takes notice. A Tooth-ach, arising from Worms, is with Difficulty cured and overcome; for it generally does not yield to the common Specifics used in other Tooth-achs. Such Medicines are, therefore, to be call'd in to our Assistance, as have the most immediate and direct Tendency to destroy Worms. For answering this Intention, *Forestus* highly extols a Decoction of Coloquintida, Pills prepared of Myrrh and Aloes, as also Worm-powders. Some, for driving out the Worms, recommend the Smoke of Henbane; but *Hagendorpius*, in his *Hist. Medic.* sufficiently shews the Disadvantages attending such a Fumigation. The Smoak of Savin may be much more safely used for this Purpose. *Glauderus*, in *M. N. C. Dec. 2. an. 5.* orders the Extraction of the Tooth; but we are never to have recourse to this severe Remedy, except in Cases of absolute Necessity. But the tartareous and tophaceous Matter, produc'd by the Scurvy and an impure Lymph, and firmly adhering to the Teeth, is most commodiously removed by a Chirurgical Operation, performed by Instruments of Steel made for this very Purpose; for this tartareous Matter is to be abraded and removed, lest it should produce a Caries, a fetid Taste in the Mouth, an unseemly Blackness, or Worms. If it adheres only gently to the Teeth, Powders of the Bone of Cuttle-fish, of calcin'd Hartshorn, calcin'd Eggshells, vitriolated Tartar, Florentine Orris, and Musk, may be recommended for whitening the Teeth, and cleansing them from the corrosive tartareous Matter. Spirit of Vitriol also, corrected by the Syrups of Scurvy-grass and Violets, is no contemptible Medicine for removing the Tartar adhering to the Teeth; but, at the same time, it must be cautiously and prudently used, lest the bony Substance of the Tooth should be corroded also by it.

We now come to consider that inflammatory Pain arising from a Defluxion either of Blood, or rather of an acrid Serum, with which the Teeth are often seized in a very severe and tormenting Manner. In Cases of this Nature we recommend all those Methods proper to be used in other Inflammations; but, above all, the Matter lodged in the affected Part is to be dissolved by a gentle Diaphoresis; and the intense Pains, which sometimes produce Fevers, continual Watchings, intolerable Head-achs, and even Convulsions, are to be soothed and alleviated by Medicines of a gently anodyne and nervous Nature. When the Body is plethoric, or when any usual Evacuation of Blood is suppressed, Blood is to be taken either from the Veins of the Arm, or from the Venæ Raminæ under the Tongue. Thus *Thonerus*, in the eleventh Chapter of his *Observations*, informs us, that he freed a Woman of a plethoric Habit from a most severe Tooth-ach by a liberal Venesection at the Ankle. After these Measures are taken, 'tis expedient to use Diaphoretics mixed with Anodynes, such as the Diascordium, the Rob of Elder, Camphire, Nitre, the Theriaca Cardialis, the Essence of Scordium, Elder-flower-water, the Bezoardic Tincture, the Mixtura Simplex, the Essence of Castor, Anodynes, and Cinabar, which may be exhibited in various Forms, and their Use continued, till a gentle Diaphoresis and Dissolution of the peccant Matter are produc'd, since these, at the same time, prevent the Increase of the Fever. But Patients of this Kind must carefully abstain from a violently sudorific Regimen, since, by throwing the Blood into strong Commotions, it not only increases the Thirst, the Pain, and other Symptoms, but also speedily destroys the Strength of the Patient. In order to dissipate the Tumor, and remove the Pain, Bags prepared of the discutient Species, Sal volatile oleosum, and mild Preparations of Sulphur,



are to be apply'd warm externally. The Ingredients proper for this Purpose are, the Flowers of common and *Roman Chamomile*, those of *Elder*, *Melilot*, and the wild *Poppy*; the Herbs *Carduus Benedictus*, *Chervil*, *Hyssop*, and *Clary*; the Seeds of *Anise*, *Caraway*, and *Dill*; *Juniper-berries*, *Camphire*, *Saffron*, *Amber*, *Bean-meal*, common *Salt*, and *Nitre*; which are all possessed of a powerfully resolvent and discutient Quality. Besides, the Patient is carefully to abstain from every cold Substance, whether fluid, or of a dry and more firm Consistence. When the Pain is highly intense, we are to exhibit internally, especially towards Night, the *Pilula Wildegansii*, and the *Pilula Matthæi*, which consist of *Opium* for their Basis, excellently corrected by other Ingredients of a diaphoretic and purgative Nature. During the Paroxysm, and when the Pain is very intense, I have, says *F. Hoffman*, often observed a few Drops of camphorated Spirit of Wine, or of my Balsam of Life, drawn up the Nose, to afford immediate Ease; which, however, does not last for any considerable Time. This Effect seems to be owing to this, that the Ramification of the Nerve distributed to the Membranes of the Nose arises from the fifth Pair, as well as that distributed to the Teeth. Frankincense also, dissolv'd in Balsam of Life, and applied to the Gums on Cotton, affords present Relief. Nothing also more speedily mitigates the Pain, than the Injection of a proper Clyster. If the Patient is of a cacochymic Habit of Body, Purgatives, and Specifics prepared of the Gums, *Mercurius dulcis*, Salt of *Amber*, Resin of *Guaiacum*, Extract of *Aloes*, and exhibited in the Form of Pills, are of singular Service, by carrying off the peccant Matter by Stool.

We now come to consider, whether Cauteries and Vescatories produce any good Effects in a Tooth-ach: Most Practitioners highly extol their Efficacy in the most violent Tooth-achs. 'Tis a common Practice to apply actual Cauteries to the Anthelix of the Ear, or the Temporal Muscles of the affected Side, for this Purpose. Others burn Cotton on the Temples; but, instead of Cotton, the celebrated *Frankius*, according to the Direction of the learned *Sereta*, uses *Okim*, which is an inflammable Rope, totally untwisted. In periodical Tooth-achs, *Spigelius* successfully used the actual Caution, with which he made a Wound in that Part of the Anthelix, which is contiguous to the superior Part of the Tragus; and consolidated the Wound in the ordinary Manner. As potential Caustics, intended for this Purpose, we may use wild Crow-foot, Horse-radish, and some others. In *M. N. C. Dec. 2. an. 9.* we are informed, that Blisters, excited on the Cubit by an Application of bruised Garlic, remove the Tooth-ach. *Jacobus Wolfius* also, in *M. N. C. Dec. 2. an. 7.* informs us, that about the Bulk of a Fig of wild Crow-foot, bruised with Spirit of Wine, and applied to the fleshy Part of the Arm, on the affected Side, raises Blisters, which remove the Tooth-ach. *Ettmüller* affirms for a Truth, that the Root of Leadwort bruised, and applied for a Night to the Wrist, in the Morning leaves a Spot of a leaden Colour, and removes the Pain of the Teeth. In *M. N. C. Dec. 2.* we are told from *Bartholine*, that the same Effect is produced by Applications of Horse-radish, and other Substances abounding with a volatile acid Salt, to the Cubit. In the last-quoted Work, *Dec. 2.* 'tis said, that the Tooth-ach is removed by a Liniment composed of eight Cantharides, three Heads of Garlic, and a proper Quantity of Theriac, applied to the Bending of the Elbow in a Linen Cloth. In my Opinion, these Remedies may, with Success, be used in violent Tooth-achs, especially such as arise from an acrid and corrosive Serum lodg'd about the Nerve, partly with an Intention to eliminate this peccant Matter, and partly with a View to derive the violent and impetuous Motion of the Spirits from the Membranes of the Tooth to other Parts. Vescatories, as also nervous, antispasmodic, and anodyne Medicines, are with great Success applied, either behind or below the Ears; because the Artery, together with the Nerve and Vein lying under the Ear, enters the inferior Jaw-bone, and is distributed to the Roots of all the Teeth fix'd in it. By this means, therefore, the acrid Serum, flowing down to the Teeth, is most commodiously diverted, and carry'd off in another Direction, or the impetuous Motion of the Spirits in that particular Nerve is sooth'd and abated. For this very Reason, a strong Compression with the Fingers, behind the inferior Jaw-bone, during the Paroxysm of a Tooth-ach, generally alleviates the Pain, so long as the Compression is continu'd. Besides, we observe in Practice, that, by applying to the Temples, as also below the Orbit, Plaisters prepared of nervous and antispasmodic Ingredients, especially Mastich, Peruvian Balsam, Extract of Castor, Camphire, Oil of Nutmegs, Saffron, and, in violent Pains, expressed Oil of Henbane, with an Addition of Opium, quickly afford Relief, because the Ramifications of the Nerve distributed to the Temporal Muscles, arise from the same common Origin with the Nerves convey'd to the Cavities of the Teeth; and the Nerve under the Orbit is immediately distributed to the anterior Teeth of the upper Jaw.

When the Teeth are loose, either in consequence of a Consumption, a Corruption, a scorbutic and putrid Exulceration of the Gums, or an Imbecillity and Weakness of the Nerves,

besides internal Antiscorbutics, and Decoctions of the Woods, for purifying the Blood and Lymph, and removing the immediate Cause of the Disorder, we are also to use external Medicines for cleansing and strengthening the Gums. In a Corrosion, or fetid Smell, of the Gums, and a Looseness of the Teeth produced thereby, I recommend, above all other Medicines, the following Liquor:

Take of Mastich, Myrrh, and Gum Elemi, each two Drams; of the Herbs *Germander*, *Clary*, *Sage*, and the Leaves of *Myrtle*, each two Pugils; of the Flowers of red *Roses*, three Pugils; of *Alum*, one Dram and an half; of *Clove-gilly-flowers*, one Dram; of red *French Wine*, eight Ounces; of camphorated Spirit of Wine, one Ounce: Let an Extract be made in a due Degree of Heat; and to the filtrated Liquor may be added different Quantities of the Spirit of *Scurvy-grass*, according to the Intention of the Physician.

This Liquor, when frequently held in the Mouth, and applied immediately to the Gums, powerfully preserves them from farther Putrefaction, fixes the Teeth, and regenerates the consum'd Flesh. But, for the same Intention, and with equal Success, we may use the Essence of *Peruvian Balsam*, mixed with the balsamic Liquor, and a proper Quantity of the Honey of *Roses*; which Preparation is possessed of a very remarkable cleansing and corroborating Quality. Sometimes so obstinate an Ulceration of the Gums happens, as will not yield to the most efficacious and best-chosen Remedies, but leaves open and running Ulcers; in which Case we are carefully to examine, whether the Disorder does not proceed from a Caries of the Tooth; and if it does, the Caries is either to be totally extirpated and removed, or the Tooth itself to be extracted. Besides, in order to preserve the Teeth from Blackness, Caries, and tartareous Concretions, as also with a View to strengthen and corroborate the Gums, it is highly beneficial sometimes, especially in the Morning before Breakfast, to wash the Mouth, and rub the Teeth, with Wine in which Sage has been infused. This Practice is also to be recommended to old Persons, whose Teeth are loose in consequence of a Weakness of the Nerves; as also to those who have the Misfortune of a fetid and disagreeable Breath. When no new Teeth supply the Place of the old, 'tis beyond the Power of the Physician to force Nature; for which Reason a palliative Cure must be used, and the Art of the Surgeon must supply the Defect of Nature, by providing the Patient with artificial Teeth, made either of Ivory, or the Tooth of the Sea-horse; which, however, are rather subservient to the Purposes of Speech and Ornament, than those of Mastication, since they must be taken out when the Patient eats. These artificial Teeth are not only mutually tied to each other, but also to the natural and sound Teeth, either with a small Wire of Silver or Gold, or with a Piece of Thread, an Instance of which *Paré*, in the third Chapter of his second Book, gives from *Hippocrates*. *A. Benedictus*, in the 22d Chapter of his third Book, tells us of *Merulus Alexandrinus*, that, after his natural Teeth had fallen out, he, with a Piece of Gold Wire, fixed artificial ones in his Gums, in order to assist his Pronunciation. But the Histories of Teeth quickly replaced, and becoming firm in their Sockets, after having been knock'd out, are, by judicious Authors, looked upon as fabulous; as also the Case of that Lady, who, wanting a Tooth, ordered one of her Footman's to be extracted from his, and inserted into her own Gums; upon which it is said to have taken Root, and remain'd fix'd in the Socket.

When there is a violent Hæmorrhage from exulcerated or scorbutic Gums, which is frequently observed by Practitioners, and is not altogether free from Danger, besides internal Diaphoretics, together with such Medicines as correct the Acrimony, and check the Effervescence, of the Blood, we are also to prescribe the external Use of strongly conglutinating Applications. In Cases of this Nature I have found singular Success from highly rectify'd Spirit of Wine, from well saturated Essence of *Amber*, or from a Liquor prepared of the Decoction of *Pomegranate-bark* and *Balaustine-flowers*, and the Syrup of acid *Pomegranates*; for, by these Preparations, the Hæmorrhage is excellently stopt. But if it should prove so violent as to resist all the Methods used for checking it, we are then, as *Tulpius* justly advises, to have recourse to that Species of Fungus call'd *Bovist*.

Among the several things which prove injurious to the Substance of the Teeth, Cold deserves our first Attention; for, according to *Hippocrates*, in the eighteenth Aphor. of his fifth Sect. "Cold is an Enemy to the Bones, Teeth, Nerves, Brain, and spinal Marrow." As Cold is highly prejudicial to the exsanguious Parts, as also to those furnished with an exquisite Power of Sensation, so, in every violent Pain or Indisposition of the Teeth, I advise the Patient carefully to guard against intense Cold. Hence the Face ought always, but more especially during the Paroxysm, to be kept warm; neither ought



the cold Air to have a free Access to the Cheeks: This is the Reason why the Pain of an excavated Tooth is considerably abated, if the Cavity is exactly fill'd with Pieces of Lead or Nutmeg. *Forellus*, in the eleventh Observation of his fourteenth Book, in order to prevent a free Access of the Air, orders a Patient, afflicted with the Tooth-ach, neither to sleep with his Mouth open, nor to speak much; for which Reason the Mouth is also to be always washed with warm, but never with cold, Water. But, at the same time, too intense a Heat is also prejudicial to the Teeth; for, according to the sixteenth *Aphor.* of the fifth *Secl.* of *Hippocrates's Aphorisms*, "The too frequent Use of hot things is attended with a Relaxation of the Flesh, and a Weakness of the Nerves; for, by too intense Heat, the Spirits are dissipated, and the Fibres, of course, relaxed." This happens because the Strength of the Nerves, which principally consists in a due Degree of Dryness, is destroy'd. For this Reason scorbutic Patients, and such as have loose Teeth, or are subject to large Hæmorrhages from them, ought carefully to avoid every thing which is either too hot, or too moist. Accordingly the *Schola Salernitana* has justly established this as a Maxim: *Pulvis ferventes faciunt corrumpere Dentes*: Hot Substances produce a Corruption of the Teeth.

All Acids, and more especially those of the corrosive Kind, are highly prejudicial to the Texture of the Teeth; for, by means of these, a Stupor of the Teeth is not only brought on, but their Substance is also gradually dissolv'd and destroy'd. Among all the Substances of this Kind, the Spirit of Nitre is the most prejudicial, since, in a short time, it is said to convert the most solid Tooth into a Fluid. Physicians, therefore, injudiciously order Patients, who are desirous of white Teeth, to use these Spirits, because they must necessarily prove noxious to the Teeth, by rendering them highly friable. Hence we are not to regard *Montanus*, who, in *Consult. Medic.* 3. highly extols these acid and corrosive Liquors for cleansing and whitening the Teeth. Large Quantities of Acids, taken internally, such as acescent Wines and Ales, by generating a scorbutic Acrimony in the Blood and Lymph, contribute greatly to bring on a Corruption and Caries of the Teeth, together with a Corrosion of the Gums. Besides, all viscid Substances, Preparations of Milk, Cheese, Sweet-meats, and Things prepared with Sugar, are prejudicial to the Teeth; partly because they supply the Principles of a scorbutic Blood, and partly because, by the Grossness of their Parts, they adhere to the Substance of the Gums, cover them with a fetid and viscid Matter, and, by that means, obstruct their Perspiration: For there is no Part of the human Body, to which, on account of its Nutrition, Perspiration is not necessary. Hence the tephaceous Matter, the Corruption, and the Blackness of the Teeth, are produced. Vegetables of the garlick Kind, as also all Substances which are too acrid, saline, aromatic, and spirituous, are injurious to the Teeth; as also all Substances which, by their saline and acrimonious Quality, either communicate a Taint to the Lymph, contribute to the Production of a Scurvy, or deprave and corrupt the Nourishment of the Teeth and Gums.

Preparations of Mercury, whether internally exhibited, or externally apply'd, are also highly prejudicial to the Substance of the Teeth; for, by mercurial Unctions, intended to raise a Salivation in obstinate chronical Diseases, we observe, that an Instability and Blackness of the Teeth, together with a fetid Corruption and Relaxation of the Gums, are produced, partly by the corroding and caustic Quality of the Mercury, occasion'd by an Accession of Salts, and partly because, by relaxing the Fibres of the glandulous and nervous Parts, it fills them with a large Quantity of Moisture. We must also observe, that Opiates never fail to prove highly injurious to the Teeth, as we may see in *M. N. C. Dec. 2. An. 2. Obs.* 163. for, by preventing the Influx of the Spirit, they dispose the Teeth, not only to become loose, but also to fall out: In considerable Inflammations, the Use of Opium may easily bring on a Gangrene and Sphacelus, or even Death; an Instance of which occurs in *Forell. Observat. Lib. 14. Obs.* 6. in *Scholiis*. But Opiates are principally injurious to old Persons, and Patients of phlegmatic Habits; because they induce Stupors, Vertigos, and Obstructions of the Head, according to the Observation of *Salmuth. in Cant.* 3. *Obs.* 32. 'Tis reported, that Tooth-drawers facilitate the Extraction of Teeth by Applications of the Seeds of Henbane and Opium; for which Reason, these Substances are never to be used, except in Cases where the Pain is highly intense; and 'tis always more expedient to prescribe them mix'd with Purgatives, Diaphoretics, and Alexipharmics, than alone. The smoking Tobacco, in consequence of its anodyne and dissipating Qualities, is not in violent Tooth-achs to be condemned, since we find, from Experience, that it produces happy Effects. But, at the same time, I will not deny, that the immoderate Use of it may produce an Instability and falling out of the Teeth, in consequence of its narcotic Quality. With respect to Dentifrices, or Powders for cleansing the Teeth, we must observe,

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that 'tis an idle and pernicious Practice to use sharp Powders; such as those prepar'd of calcin'd Flint, Pumice-stone, and Coral, because, by these, the Substance of the Teeth is consumed and abraded: 'Tis therefore expedient, entirely to abstain from them, and only to use Crabs-eyes, calcin'd Shells, and the Bone of the Cuttle-fish, reduced to a fine Powder; with which may be mix'd the Powders of Nutmeg, Orris, Mastich, Alum, and a little Musk. This is an excellent Powder; not only for cleansing and fixing the Teeth, but also for rendering the Breath grateful and agreeable. With this; or some other such Powder, the Teeth, if possible, are to be rub'd after every Meal, but not roughly. For this Purpose, we may take the large Roots of Mallows, or Marshmallows, well clean'd, and immerfed in Vinegar of Roses. With the Extremities of these Roots, bruised and sprinkled with the above-mentioned Powder, we are gently to abrade and wipe away the Sordes adhering to the Teeth. *Frederic Hoffman, de Dentibus, eorum Morbis, & Cura.*

#### Farther OBSERVATIONS of the TOOTH-ACH:

The Tooth-ach seems to be a particular Species of Rheumatism; for, in Practice, we often observe Pains of the Joints, Scapulæ, and Shoulders, translated to one Side of the Head, the Teeth of which they attack in a most violent manner. On the contrary, Pains of the Head and Teeth are frequently observed to change their Seat, and fall down upon the Shoulders, the Arms, and the Scapulæ. As a Rheumatism is generally produced by any Intemperance or sudden Change of Air, so also a Tooth-ach is generally excited in such as are previously disposed to it, especially if they happen to be of a cacochymic Habit, by their suddenly removing from a warm to a cold Air, or by the sudden Vicissitudes of Heat and Cold, in the Spring and Autumn. As Rheumatisms are more incident to Women than to Men, so also are Tooth-achs, and that for the same Reasons. Besides, though these two Disorders are less frequently incident to Men than to Women, yet they generally prove far more severe in the former, than in the latter. There is a certain Analogy, not only between a Rheumatism and a Tooth-ach, but also between a Tooth-ach and a Gout; for as arthritic Disorders are accompanied with Pain, Redness, Swelling, and a slight Fever, so the same Symptoms are observed to attend a Tooth-ach. Besides, 'tis confirm'd by Experience, that such as are subject to rheumatic or arthritic Disorders, are rarely afflicted with Tooth-achs, but, for the most part, have their Teeth sound and entire; whereas those who are free from those Disorders of the Muscles and Joints, are generally, for that Reason, more subject to Tooth-achs. As in Rheumatisms and Gouts, so also in Tooth-achs, those who have been once afflicted, are easily, and, by every slight Cause, subjected to fresh Attacks of the Disorder, on account of the Weakness which these Diseases generally leave in the Parts; so that a Gout, a Rheumatism, and a Tooth-ach, seem to be but one and the same Disease, appearing with different Degrees of Strength, attacking different Parts, and therefore accompany'd with Symptoms seemingly different, though produc'd by one common Cause. Hence it follows, that the Regimen and Method of living, proper in one of these Disorders, must of course be so in the other also: But these Things are so obvious to every Person who will only allow himself to think, that there is no Necessity for a longer or more explicit Illustration of them. When Tooth-achs are so intensely violent, as to resist the Force, and elude the Efficacy, of all other Medicines, *Hoffman* tells us, that he has observ'd a very singular and unexpected Relief, afforded by the following Pills, invented by himself:

Take of the *Pilule Aloephanganæ*, one Dram; of the *Pilule de Styrace*, half a Dram; and of the Extract of Saffron, six Grains: Mix up into a Mass, of which form sixty Pills; six or eight of which are to be exhibited for a Dose.

#### Observations on the DENTITION of CHILDREN.

Nature has not thought fit, that Men should be born with Teeth; but hath more wisely provided for sucking Infants, by making their Teeth grow by degrees. The first Principles of which, yet in the Womb, are merely membranous Filaments, fill'd with a nutritive Juice, which are first inspissated into a Mucus, then harden'd to a Cartilage, and, lastly, contract a bony Firmness. Though the Time of Dentition varies as much as the Constitution of Infants, some having Teeth in seven or nine Months, others scarcely in the Space of a Year, yet generally this Order is observed in the Eruption: The *Incisores* are ripen'd by the Attrition of the Nipples in sucking, and make an Eruption first in the lower Jaw-bone; the *Canini* succeed these; and, last of all, the *Molares* break out.

Though the Eruption of the Teeth be a thing evidently natural, and to some Infants produces no great Trouble; yet, because of the various Symptoms attending it, in many Infants, it creates great Uneasiness; and hence arises a difficult Dentition,



tion, which is generally nothing but a more slow and painful Eruption of the Teeth through the Gums, and may be known by the following Signs : They first burn with a preternatural Heat, and are seiz'd, as it were, with sudden Frights ; you may observe them start in their Sleep, which is very much disturb'd, and cry more frequently ; they suck the Milk more greedily from the Breast, and more frequently put their Hands to their Mouths. All this time the Jaws, in the fore Part of the Mouth, begin to swell, and, when swell'd, become white or red ; a greater Quantity of Saliva is frequently discharged into the Fauces ; a tenacious Lymph frequently hangs out at their Mouths, and the Belly is either costive, or the Fæces are evacuated by a Diarrhœa. These Symptoms are accompanied with others much more dangerous, such as convulsive and epileptic Motions, acute Fevers, violent Contorsions of the Jaw-bones, and other Symptoms of a like Nature, which have different Effects, according to the different Degrees of the Difficulty of Dentition, and the Sensibility of the tender Patients.

The Cause of difficult Dentition proceeds sometimes from the Teeth, and sometimes from the Gums : From the former, when the Teeth, endeavouring to force their Passage, are either too big, or too sharp, as the *Canini*, or *Oculares* ; or when, by growing too slowly, they corrode, pinch, and perforate the Gums, for too long a time ; or when many grow out at the same time too hastily : From the latter, if their Texture be so gross and strong, as to prevent the Teeth, which are conceal'd in the Sockets of the Jaw-bones, from making their way freely.

As the Flesh of the Gums, which is very sensible, being made up of various membranous and nervous Fibres, must, in a great measure, be hurt, prick'd, and inflam'd, by such a violent Protrusion of the Teeth, we are not to wonder, that an Itching, Heat, and Pain of the Gums, accompanies a slow Dentition ; or, because of the vehement Irritation, and the consequent Commotion of the nervous System, that sudden Frights, Startings, want of Rest, Vomitings, Asthmas, Coughs, and even convulsive and epileptic Fits, should ensue ; especially if the Infants have previously labour'd under either a natural or adventitious Weakness of the Brain, or nervous System, and a Disposition to spasmodic Contractions ; which afterwards palpably discovers itself, and is increased, when they are seiz'd with acute Pains, or the Attacks of a Fever.

Neither will it be difficult to find out the Reason, why the Belly, under a Difficulty of Dentition, should be either preternaturally costive, or too soluble ; for since such is the Nature of any vehement Pain, and of this also which arises from the Teeth, that it excites Spasms through the whole Body, and at the same time injures also the *Primæ Viæ*, this corrupts and sours the Milk ; and the free Discharge of the Belly, depending thereon, is either accelerated or retarded.

As to the Prognostics, we often find Dentition dangerous and fatal to Children ; for those violent and severe Distempers, which, as I have said, either attend or follow it, frequently bring on such a Weakness of the Parts, that the Infant has not Strength to go through the Dentition ; and then the other Symptoms increase the more. Dentition is the most dangerous to Infants who are plethoric, and to those also who become, in a manner, languid and heavy by too much Sleep ; which is a Sign of a subsequent Convulsion, according to *Hippocrates* ; who also asserts, that Infants are more slow in breeding their Teeth, if they have a Cough, and that their tender Bodies are more extenuated on this Occasion ; which must certainly be the Case, because the Cough diminishes the Strength necessary for the Protrusion of the Teeth, and shews that there is a great deal of viscid and acrid Juices in the Body ; which, as they vehemently irritate the Gums, must undoubtedly be very troublesome to Infants, whilst they breed their Teeth. In like manner, those are in a more dangerous Condition who are costive, than those who are soluble, in their Bodies ; though we know by Experience, that both the one and the other have died of Convulsions, excited by the Pain, during the Paroxysm of the Fever. It is also of Use in this Case to know, whether the Infants be very delicate, or are begot by passionate Parents ; for, if so, Convulsions will more certainly happen, and be of more dangerous Consequence ; though all that are seiz'd with Convulsions do not die. Finally, by how much greater the Difficulty, and the longer the Time, of the Eruption of the Teeth is, so much greater is the Danger, lest Nature should be too much weaken'd, and at last sink under the Disorder. But as to what *Hippocrates* farther advances in the above quoted Place, about Infants escaping Convulsions, provided they have an acute Fever, and their recovering more easily in Winter, than in Summer, I shall leave to the Experience of others.

#### The C U R E.

He that would effectually cure those Distempers that threaten Infants, ought, in the first Place, carefully to advert to the Time assign'd by Nature for Dentition, which is commonly about the seventh Month ; and should, before the Difficulty of

Dentition begins, take care that he eats nothing which is solid or hot, but the most thin Aliments, and the thinnest Sorbitions. And, as the Temperature of the Nurse, and a proper Regulation of Diet, is of singular Use to the sucking Infant, Care ought to be taken, that she abstains from all heating Substances, such as Wine, Aromatics, and such-like ; and rather make use of alterative and moistening Things, and accustom herself to the Drinking of Water. These Things may and ought to be attended to at the time of the Eruption, as well as before it becomes troublesome.

In the Method of Cure, the principal Thing to be adverted to is, to alleviate the Pain and Inflammation, which are commonly attended with slight Fevers, Convulsions, and Diarrhœas ; as also to relax and soften the Gums, which will forward the Eruption. For answering this Intention, Medicines possess'd of a precipitating Quality are, of all others, the most effectual : Of this Kind, the principal are Jellies of Hartshorn, dissolv'd in some proper Liquor, with Essence of wild Poppies, and a few Drops of the anodyne mineral Liquor, exhibited at proper Intervals. A proper Dose of the following Mixture may be also frequently exhibited with singular Success :

Take of the Waters of Lilies of the Valley, of Lime-flowers, and Cowslips, each one Ounce ; of the *Pulvis Marchionis*, and diaphoretic Antimony, each one Scruple ; of Saffron, a few Grains ; of the Syrups of Garden Piony, and wild Poppies, each one Dram ; adding a few Drops of the Spirit of Sal Ammoniac.

As, in all violent Distempers incident to Infants, it is often of more Use to give Medicines to the Nurse, than to the Infant ; so in all vehement Symptoms of a slow Dentition, we ought to observe the same Rule. This Intention I have often seen excellently answered by exhibiting antispasmodic Medicines to the Nurse ; such as Powders compos'd of Piony-root, uncalcin'd Hartshorn, the fossil Unicorn, Amber, Castor, and other Ingredients of a like Nature.

Nothing tends more to increase and augment the Impetus of the Humours to the upper Parts, than a long-protracted Costiveness, and the Flatulencies and Spasms thereby produced in the Intestines, which are lin'd with a nervous Coat. Wherefore, what a Physician ought principally to regard, is to render the Body of the Infant sufficiently soluble by emollient and oleous Clysters, and that of the Nurse by proper Purgatives, lest the Cure should be either retarded, or totally prevented, by such a noxious Cause.

But we may also make use of external Remedies, applied to the Gums ; for the softening and relaxing of which, Cream, sweet Butter alone, or mix'd with Honey, conduces very much ; nor is it of less Use to apply a Fig, divided in the Middle, to the Part where the Tooth is endeavouring to force its Way, and begets a Swelling, Pain, and Heat ; or to apply the Marrow of Calves Legs, Mucilage of Quince-seed, with a small Quantity of the Yolk of an Egg, dissolv'd in Rose-water, and the Syrup of Violets, or Hares Brains, which is reckon'd an excellent Specific in this Case : And what we find to be of singular Efficacy here is, a Liniment prepared of Sperma Ceti, the Syrup of white Poppies, Oil of sweet Almonds, Saffron, and Nitre, and applied as an Ointment to the Flesh of the Gum that is affected. A Crust of white Bread, boil'd in Milk, and mix'd with a little Oil of Roses and Saffron, is mightily recommended by some, as an Anodyne for Pain and Inflammations.

But, if the Teeth should not make any Eruption, we must make an Incision on the Gums, and, with a Knife, cut the Membranes next to the Extremities of the Teeth ; and this Experiment I have frequently found successful.

In difficult Dentition, all Things of a heating purgative Nature, spirituous Things held to the Nostrils, and Astringents applied to the Gums by way of Ointment, are pernicious ; because, while the Motions are accelerated through the whole Body, the Symptoms are heighten'd, and the Fever, which is a more frequent, and, for the most part, an individual Concomitant of Pain, is thereby increased. And, for this Reason, Mothers are much to blame, who keep their Children under too hot a Regimen, or keep them in too warm Beds and Rooms, while they are seiz'd with those Distempers which are attended with Pain, a Fever, and Inflammation. Since we may conceive greater Hopes of a Recovery from a free Discharge of the Belly, Corroboratives or Astringents ought not, by any means, to be us'd ; for I have always observed them to be of dangerous Consequence, and have seen Convulsions, with other Symptoms, much sooner, and more certainly, follow thereupon. *Frederic. Hoffman.*

#### Chirurgical Operations relative to the TEETH.

Some Persons have their Teeth and Jaws so closely and violently pressed together, that they cannot be separated for the Admission of Food, or the clear Utterance of Speech : This Disorder



Disorder seems to be owing to a Rigidity or Spasm in the Muscles of the lower Jaw; whence it is denominated a *Rigor* or *Spasm* of the Jaw. This Sort of Spasm or Convulsion proceeds not always from the same Cause; for sometimes it is excited by a Wound in the Nerves or Tendons in some Part of the Body, or after the Amputation of an Arm or Leg, as I have frequently observed in Camps; and sometimes it is caused by an Inflammation of the Jaw itself, or the Muscles of the Fauces.

When the Disorder proceeds from a Wound, you are first of all to examine, whether any extraneous Matter be retained in the Wound, and so occasions these Spasms; for when this is found and extracted, the spasmodic Motions immediately cease, though they obstinately resisted all nervous Medicines. If no foreign Body lies concealed in the Wound, you may reasonably conclude, that the Spasms proceed from an Injury of the Nerves or Tendons; and must therefore have recourse to the Remedies provided in these Cases, such as Balsam of *Perru*, Balsam of *Capiva*, Oil of Turpentine, or a Mixture of this Oil, and Hungary-water, moderately heated, and now-and-then infused into the Wound; after which must be applied some digestive Cataplasm, composed of Scordium, Wormwood, Southernwood, with Flowers of Elder, Flowers of Chamomile, and such others, boil'd in Wine. If these, and other proper Remedies, fail of Success, you are obliged totally to divide the wounded Nerve, unless it cannot be done without Danger of present Death; after which, these Spasms and Convulsions will cease in less Time than you could imagine. Sometimes the injured Nerve is so profoundly seated as to be inaccessible, or not to be divided without imminent Danger of Death. This, indeed, is a miserable Case; but yet there is one only Remedy, which is, speedily to cut off the Arm or Leg, in which the injur'd Nerve is seated, if the Patient has Strength enough to bear it. If the Disorder happens after the Amputation of a Limb, the Cure is much easier to be perform'd; for, in this Case, it often ceases of itself, as soon as the Ligature on the Vessels, or the Ribs of Vitriol, applied to restrain the Hæmorrhage, are removed. In the mean time, 'tis no unusual thing for the most efficacious Medicines, and the most proper Methods for Relief, to prove ineffectual in this Disorder; so that I have frequently seen Patients, labouring under it, perish in the most lamentable and calamitous Condition. When an Inflammation of the Tonsils, or of the Muscles, by which the Jaw-bone is supported, hinders the Teeth from receding from each other, the best Method is to remove this Inflammation, by the same Measures used for the Cure of other Inflammations; for when it is removed, the Rigidity and Stiffness of the Jaw-bones and Mouth will, of course, gradually cease. But lest, during this State, the Patient should be too much wasted with Hunger, 'tis absolutely necessary to exhibit Broths, warm Ale, prepared with the Yolks of Eggs, Emulsions of sweet Almonds, Jellies of Hartshorn, and other highly nutritive Preparations, which may be sup'd even with the Teeth close. Besides, if Necessity should require it, nutritive Clysters, compounded of the like Ingredients, are to be injected.

Some Physicians have invented Instruments of different Kinds for separating the Jaws, commonly call'd *Specula Oris*, or *Specilla Oricularia*. By the Assistance of these, one of which is exhibited in *Tab. 41. Fig. 12.* and another *Fig. 13.* both Aliments and Medicines may, indeed, be more commodiously exhibited; but, at the same time, I am so far from recommending their Use as salutary and beneficial in all Cases, that I am persuaded every judicious Surgeon must look upon it as hurtful and pernicious, in some. Nor, indeed, can it well be otherwise, since by the violent and forcible Separation of the Teeth, the Inflammation of the Muscles, and, consequently, the Spasms and Pain, must necessarily be increased; whereas the Patient might be much more mildly treated, and the Danger of increasing the Inflammation shun'd, by the Patient's sucking forbile and nutritive Preparations, in the manner before-mentioned. So that the Use of these Instruments may justly be rejected and condemned, not only as trifling and unnecessary, but also as cruel, and productive of the worst of Consequences. Nor does the Practice of *Dionis*, a celebrated *French* Surgeon, seem to deserve a more favourable Censure; for in Cases where by these Instruments the Teeth cannot be separated for the Exhibition of Aliments or Medicines, he forthwith orders a Tooth to be taken out, for that Purpose. But in Cases where there is a Necessity for opening the Teeth pretty wide, either in order to discover some Disorder of the Mouth, or to perform some Operation on the Palate, Tonsils, or Teeth, I am so far from condemning these Instruments, that, for this Purpose, I recommend the *Speculum Oris*, represented in *Tab. 41. Fig. 13.* or some other Instrument capable of answering the same End.

*The Methods of cleansing foul and black T E E T H.*

Since by means of those yellow, blackish, and unseemly

Scales, which sometimes cover the Teeth, the Mouth is not only considerably deform'd, and the Breath made disagreeable; but also the Teeth themselves render'd loose; it seems highly necessary to cleanse and deterge these rough and foul Teeth with all Expedition. For this Purpose, there are various Instruments us'd, such as these represented in *Tab. 41.* by *Figures 14. 15. 16. and 17.* Some of these, according to their several Intentions, are narrow at the Apex, or Point A; some of them broad, some of them sharp, and others of them arch'd, in the Form of a Scythe, as in *Fig. 17.* But all of them may be either fix'd in one common Handle, represented by the Letter B, in *Fig. 14.* or they may also be fix'd in Handles peculiar to themselves, as in *Figures 16. and 17.* taken from *Fouchard*. Applying these near the Gums, and holding the Extremities of the Teeth firm with the other Hand, these Scales are to be render'd loose, and gradually abraded. But this is to be done cautiously, lest the Gums should be dilacerated, or the Tooth itself rashly pull'd out. After this, the most proper Method to be taken is, for some Days sufficiently to rub the Teeth and Gums with *Mynsicht's* Tincture of Lac; or with Honey of Roses, mix'd with a few Drops of the Spirit of Salt or Vitriol; for, by this means, the Teeth are not only render'd incomparably white, but the Gums are also corroborated and strengthen'd. Not long ago I saw a Tooth-cleaner in *Saxony*, who, tho' he was provided with all these Instruments, yet, by means of that single one represented by *Fig. 17.* quickly abraded the Scales from the Teeth of several Persons in my Presence.

But, lest fresh Scales and Blackness should again deform and disorder the Teeth, 'tis necessary always to have a good Dentifrice in Readiness; by which the Teeth may be cleans'd, and render'd white and firm, every sixth or seventh Day; for rubbing the Teeth too often, or with such Substances as are too acrid, crude, and drastic, proves almost as prejudicial, as a total Neglect of them. Thus, the sharp Powder prepar'd of Pumice-stone, Bricks, Coral, the Ashes of Tobacco, and other Substances of a like Nature, too powerfully wears away and abrades the Teeth: And Spirits, also, and more especially those of Vitriol and Salt, gradually corrode and consume them. The safest and most innocent Dentifrices are prepar'd of milder Substances; such as Crabs-eyes, Mother of Pearl, calcin'd Shells, calcin'd Hartshorn, Chalk, Root of Florentine Orris, Myrrh, and other Substances of a like Nature, reduc'd to Powder, and mix'd together. When the Gums are less firm, we may commodiously add a few Drops of the Spirit of Salt, or that of Vitriol. The Composition for this Purpose may be prepar'd in the following Manner:

Take of calcin'd Chalk, of red Myrrh, of the Roots of Florentine Orris, and of calcin'd Hartshorn, each one or two Drams; and of the Spirit of Salt, between three and six Drops: Mix, and reduce to a fine Powder to be kept for Use. Or,

Take of calcin'd Shells, and calcin'd Mother of Pearl, each two Drams; of Dragon's-blood, one Dram; and of *Japan* Earth, one Scruple: Mix, and reduce to a fine Powder.

In order to give these Powders a grateful Flavour, we may pour upon them a few Drops either of the Oil of Cinnamon, Cloves, or Rhodium. Ashes of Tobacco, provided they are rarely us'd, are an excellent Remedy for Blackness of the Teeth; as is also the following Preparation:

Take of Plantain-water, one Ounce; of the Honey of Roses, two Drams; and of the Spirit of Salt, ten Drops. Mix all together.

In this Preparation, dip a small Portion of a Napkin, or Linen Cloth, with which rub the Teeth daily, till they become whiter, using at the same time some proper Dentifrice, every sixth or seventh Day. The Custom of those Quacks, who, for removing Blackness of the Teeth, recommend the frequent and liberal Use of the Spirit of Salt, or Vitriol, is to be condemn'd, since acid Spirits of this Kind more effectually corrode and destroy the Teeth, than any other Substances whatever. But if People are resolv'd to use either these, or any other acrid Spirits, I would advise them immediately after, to wash their Mouths with pure Water, lest some of the Acrimony of these Liquors should remain about the Teeth. For what I can perceive, the most effectual Means of preserving the Teeth sound and entire, is, not only in the Morning, but after every Meal, to wash the Teeth with pure Water, and cleanse them with the Finger. Some good Dentifrice must, at the same time, be us'd once a Week, either by itself, or in Conjunction with common Salt, which I have found highly efficacious for this Purpose. By this means, the Teeth may not only be kept free from those  
tenacious



tenacious Humours, or Remains of the Aliments, which produce Scales on the Teeth, but, which is still more, this is the most effectual Method of preserving them from Corruption, Pains, and Disorders of every kind.

*Of corroded and carious T E E T H.*

When Teeth are corroded, or, what we commonly call carious, it must, in the very Nature of the Thing, frequently happen, that some Particles of the Aliments must insinuate themselves into the small Cavities or Perforations of these Teeth; and, whilst these Particles gradually become putrid and acrid, they more and more corrode the Teeth, together with their Nerves and Membranes; by which means, they not only deform, but also torment the Patient. Left Surgeons should seem to have forgot or overlook'd these Disorders, Medicines have been long ago invented, if not for removing, yet, at least, for alleviating and abating them. The first thing therefore, to be done, in Cases of this Nature, is by a small Needle, a Tooth-picker, or any other proper Instrument, such as those represented in *Tab. 41. by Figures 19. 20. or 21.* dextrously to remove the Sordes from the Cavities or Perforations, which are forthwith to be fill'd either with Mastich, or white Wax; and, if these Portions of Mastich or Wax should happen to fall out, new ones are forthwith to be put in their Places: By this means, the Teeth are often preserv'd for a long time, not only from the Sordes of the Aliments, and the Effects of the Air, but also from farther Corruption. When the Caries is not very deep, it may often be commodiously remov'd, by means of a proper File: But when the *Dentes Molares* are seiz'd with a Disorder of this Nature, especially in the Middle, the most efficacious Method of Relief seems to consist, in filling the Cavities with Shreds of Gold or Lead, by means of the Instruments exhibited in *Tab. 41. by Fig. 20. and 21.* or in inserting a Piece of solid Lead into the Sinus. When the Cavities or the Caries of the *Dentes Molares* reach pretty deep, so that they cannot be commodiously cleans'd in the Manner now directed, and must consequently be rack'd with violent Pains, it is expedient to drop into these Cavities either Oil of Cloves, Oil of Cinnamon, Oil of Guaiacum, or Spirit of Vitriol; by which means, the latent Sordes are not only consum'd and destroy'd, but sometimes also the Pain instantaneously alleviated and abated. If these Medicines should prove too weak to produce the design'd Effect; an actual Cautey, accommodated to this Purpose, and exhibited in *Tab. 24. Fig. 14. and 16.* or in *Tab. 41. Fig. 20. or 21.* is to be introduc'd into the Cavity of the Tooth; for, as this Operation quickly removes the Sordes and the Pain, so it creates no great Uneasiness to the Patient, provided it is perform'd with sufficient Caution, and without injuring the adjacent Parts. When the Cavities of the Teeth are thus cauteriz'd, they are carefully to be fill'd with some proper Substance, lest the former Pains should recur: But if all these Measures should prove ineffectual, or if the Cavity of the Tooth can neither be fill'd with Gold, Lead, nor Wax, the only Method of Relief remaining, is to extract the Tooth, if no Circumstance contraindicates.

*The Method of affording Relief in T O O T H - A C H S, by manual Operation.*

Sometimes Tooth-achs are so violent and intolerable, that they obstinately resist the best chosen and most efficacious Medicines; in which Case, the Means of Relief are only to be obtain'd from manual Operation: For, first, the Pains are either to be alleviated by scarifying the Gums, as *Pliny*, in the seventh Chapter of his thirty-second Book, has long ago observ'd; and this Method is frequently practis'd: Or, secondly, an actual Cautey, adapted to this End, is to be plung'd into the Cavities of the carious Teeth, in the Manner already directed: Or, thirdly, the Part behind the Ear, by Anatomists call'd Antitragus, is to be cauteriz'd, or have an Incision made in it; or, according to *Schellhammer*, it is to be strongly compress'd with the Fingers: Or, in the fourth and last place, the corrupted and carious Tooth is to be extracted.

*The Method of correcting uneven T E E T H, and such as prick the Tongue and Lips.*

Sometimes the Teeth grow in such a preternatural and disagreeable Manner, as to incline too much either to the internal or the external Parts. But it much more frequently happens, that the sharp and pointed Parts of fractur'd Teeth protuberate in an unequal manner. In both these Cases it generally happens, that the Speech and Mastication are not only in some measure hinder'd, but also the Tongue or Lips are prick'd and dilacerated; in consequence of which, Inflammations, Tumors, Ulcers, and, very frequently, Cancers, are brought on. A speedy Stop must necessarily be put to the Cause of these formidable Disorders, either by abrading these troublesome and noxious Teeth, by such a File as is repre-

sented in *Tab. 41. Fig. 22.* or, if the Case requires it, by cutting off the prominent Parts with a very sharp Forceps. But, if neither of these Methods should prove effectual, the Tooth which creates the Uneasiness is to be totally extracted.

*The Methods of extracting T E E T H; and the several Cautions to be observ'd in performing that Operation.*

Those little consult the Interest of Health and Ease, who rashly, and without urgent Necessity, submit to the Extraction of Teeth, as yet firm and sound: For, so long as Teeth remain firm, the Extraction is not only highly painful; but also frequently endangers Life; since they are fix'd in their Sockets, like so many Nails in a Piece of Wood. Besides, Mastication and Speech are considerably injur'd by extracting Teeth, especially in the anterior Part of the Mouth. This Misfortune is irreparable in Adults; since there are little or no Hopes left, that new Teeth will succeed those which are extracted. There are, however, a great many Cases, in which this Operation is absolutely necessary; for, first, in Infants, it is more expedient cautiously to extract the *Dentes Incisores* when loose and disengag'd, than to wait till they drop out spontaneously. When, therefore, these Teeth first become loose, they are to be mov'd backwards and forwards with the Fingers, till they are so effectually disengag'd, that they may be speedily extracted, either by the Attempts of the Fingers, or by a Thread twist'd about them; or, which seems to be still more commodious, by a proper Forceps, such as that commonly call'd by Surgeons the Crow's-bill; for, when these Teeth are allow'd to remain too long in the Gums, there is some Danger, lest new Teeth, springing up near them, should create fresh Pain, and bring on Deformity. Secondly, it sometimes happens, that, in Infants, Teeth arise in the Palate, or in some other preternatural and improper Place. As these prove a Hindrance to Suction and Speech, or bring on some other Inconvenience, they are, with the greatest Caution, to be extracted, as soon as they appear. Thirdly, it sometimes happens, that Teeth, especially when corroded, are afflicted with such violent and intense Pains, as will yield to no Medicines, however efficacious; in which Case, manual Operation becomes necessary. Fourthly, when Teeth are of a Bulk and Figure so preternatural and uncommon, as either to deform the Mouth, injure the Tongue and Lips, or prevent the Conglutination of any Wound, that may possibly be made in them, such Teeth are, with all Expedition, to be extracted. Fifthly, such Teeth as are become fistulous are also to be extracted; because, for the most part, this Species of Disorder cannot be remov'd without the Extraction of the Tooth affected. Teeth of this kind, are to be extracted in the following manner: If the Tooth to be extracted is lodg'd in the inferior Jaw-bone, the Patient is either to be plac'd on a low Seat, or on the Ground; but when a Tooth is to be extracted from the superior Jaw-bone, the Patient is to be plac'd on a Seat somewhat higher, or on a Bed: Then the Surgeon is, with some proper Instrument, to pull the offending Tooth in a straight Direction, from its Socket, in the same manner as a Person draws a Nail out of a Piece of Wood. In extracting the Teeth of the inferior Jaw, the Instrument is to be pull'd straight upwards; and, in extirpating those of the superior Jaw, straight downwards. But a great deal of Art and Dexterity is necessary in this Operation, lest we should either break the Teeth, or attempt their Extraction without Success. As for the Instruments calculated for the Extraction of Teeth, they are so numerous and various, that every Surgeon cannot fail to be acquainted with them. Those best known, and most commonly us'd, are the Pelican and Crow's-bill. Some other Instruments, less commonly us'd, we have delineated in *Tab. 41. Fig. 23. 24. and 25.* But the peculiar Advantages attending them, are better represented by Practice, and the real Application of them, than by Words. When none of the Species of Forceps prove sufficient for extracting the Fragments or Roots of fractur'd Teeth, there are other Instruments, contriv'd for that Purpose; the most common and best known of which is, that call'd the *Pes Capræ*, or Goat's Foot; and another, design'd for the same Purpose, we have represented at *Fig. 26. Tab. 41.* The Instrument represented at the Letter A, *Fig. 23.* is generally us'd for the same Purpose; and the other Part of it, exhibited at the Letter B, is intended for the Extraction of the Tooth. More Instruments for these Purposes are describ'd and delineated by *Garengeot*, in his *Traité des Instruments de la Chirurgie*, and by *Fauchard*, who was well acquainted with the Disorders of the Teeth, and the most effectual Methods of relieving them. But it is to be observ'd, that Teeth, tho' in some respects there should be a kind of Necessity for extracting them, are, nevertheless, to have no Attempt of this Nature made upon them, when the Gums, or any of the adjacent Parts, are affected with a violent Inflammation; otherwise there is a Danger, lest, by the Violence of the Pain excited, the Operation should be succeeded



ceeded by a higher Degree of Inflammation, and other troublesome Symptoms.

*The Method of fixing artificial TEETH.*

The Want or Defect of the anterior Teeth is not only a considerable Deformity, but also a great Hindrance to distinct and articulate Pronunciation, as we have already observ'd, and as daily Experience confirms. That these Defects and Misfortunes may be properly supply'd, Surgeons have fallen on an Expedient to make artificial Teeth, either of Ivory, the Teeth of the Sea-horse, or the Bones of an Ox; which are to be carefully fix'd to the remaining sound and natural Teeth. When there are several Teeth, adjacent to each other, lost, there must be a proportionable Number of artificial ones, made of the same Bone, fix'd in their room; and these, either by means of their Figure, or, by the Assistance of a Piece of Gold-wire, or Silk-thread, are to be properly united to each other, and to the adjacent sound Teeth. But that these artificial Teeth may be the more effectually preserv'd from Corruption, it is expedient to take them always out before going to Sleep, carefully to cleanse them, and refix them upon getting out of Bed. If any Root or Splinter of the natural Teeth should prevent the commodious Insertion of the artificial ones; such an offending Body is either to be abraded by a File, or extract'd with some of the Instruments recommended above.

*Explication of the Figures in Tab. 41. relative to Operations on the TEETH.*

Fig. 12. represents an Instrument, commonly call'd a *Speculum Oris*, furnish'd with a Screw for separating the Teeth, when any chirurgical Operation is to be perform'd in the Mouth. The Letters AA denote the Parts to be introduc'd between the *Dentes Incisores*, which may be separated at Pleasure by the Screw B.

Fig. 13. represents another Species of *Speculum Oris*, made in the Form of a Forceps; the Part A of which is apply'd to the Tongue, for suppressing and rendering it firm. The Part BB is apply'd under the *Dentes Incisores* of the superior Jaw; and by the Handles or Extremities CC the Mouth is kept open, and the Tongue depress'd at the same time.

Fig. 14. 15. 16. and 17. represent Instruments adapted for cleaning foul Teeth, and such as are cover'd with Scales. Their Points are of various Forms, according as the anterior or posterior Teeth, or those of the superior or inferior Jaw, are to be clean'd. The common Handle B, exhibited by Fig. 14. is so contriv'd, that all these Instruments may, in their turns, be fix'd in it, by means of the Screw CCC.

Fig. 18. and 19. are two Instruments, destin'd for the same Purposes, but somewhat larger, and such as *Fauchard* thinks best suited to the Design.

Fig. 20. and 21. exhibit two Instruments, not only for cleansing the Cavities of the Teeth, but also for cauterising them, or filling them with Shreds of Gold or Lead.

Fig. 22. represents a File for filing such Teeth as are either carious, or prick the Tongue and Lips. A exhibits the File itself; and B its Handle.

Fig. 23. represents a new Species of Tooth-drawer. The Part A may commodiously be us'd instead of the *Pes Capræ*, or Goat's-foot, for extract'ing the Roots of Teeth. The Part B, with the Addition of the Hook C, is accommodated to the Extraction of entire or whole Teeth; for it may not only be drawn out, by means of the Screw D, according to the Bulk of the Tooth to be extract'd, but it may also be conceal'd in the Covering E, when bent back, if Convenience should require it.

Fig. 24. represents another Tooth-drawer, which, by means of the Screw A, may be render'd fit either for extract'ing small or large Teeth, by twisting about the Ball or Handle B.

Fig. 25. exhibits another Instrument for the same Purpose, furnish'd with three Hooks; one straight, represented by A; and two incurvated, exhibited by BC. The straight Hook is intended for the Extraction of the anterior *Dentes Molares*; and the more bended Hooks serve to extract those, which lie more remote, either on the Right or Left Side: And every one of these Hooks may be fix'd to the Body of the Machine, by means of the Screw D, according to the Position of the Tooth to be extract'd. The principal Part of this Machine, F, may be set longer or shorter, as Necessity requires, by means of the Handle E, and the Screw G.

Fig. 26. represents a Hook proper for extract'ing some Teeth, and their Roots. *Heister. Institut. Chirurg.*

DENSITAS, *πυκνότης*. Denseness is sometimes oppos'd to *Raritas*, Thinness; and then signifies Closeness, or Compactness; and sometimes means the same as *Crebritas*, Frequency. The Adjective *densus* is express'd by *δαῦς*, (see *DASY*) and also by *πυκνός*, which in *Hippocrates*, 5 *Aph.* 62. signifies Denseness of Contexture; but, apply'd to the Pulse, or Respiration, imports Frequency, as in 6 *Epid. Sect.* 4. *T.* 4.

V O L. II.

DENTAGRA, *δονταγρα*, from *δόντις*, a Tooth, and *ἀγρεα*, a Capture, a Surgeon's Instrument, or Forceps, for extract'ing of Teeth. It is also call'd *φάλλις*, and its other *Latin* Names are *Dentoducum*, *Dentarpago*, *Odontagogum*. See various Forms of these Instruments in *Paré, Lib.* 16. *Cap.* 27: And in *Tab.* 41: *Dentagra* signifies also the Gout in the Teeth, for which see *ARTHRITIS*.

DENTALIS *Lapis* is the tartareous and tephaceous Matter, which, being formed of a Coagulation of vitious Particles, adheres to the Teeth, and is consolidated into almost a stony Hardness. *Helmont, Alimenta Tartari infantia, Numb.* 23.

DENTALIUM, *Offic. Schrod.* 5. 328. *Charlt. Exer.* 63. *Mont. Exot.* 6. *Dentales*, *Scyll.* p. 136. *Tab.* 18. n. 7. 8: *Dentalium Conchæ Species*, *Ind. Med.* 45. *Dentale læve, album, altera extremitate rufescens*, *List. Hist. Conch.* 14. *Secl.* 11. n. 2. *Dentales*, *Gesn. de Aquat.* 345. *Tubulus Dentalis lævis*, *Lang. Meth. Testat.* 5. *Rondel. de Pisc.* 2. 110. *Antales dicuntur alij ejusdem formæ, sed minores*, *Bonan.* 91: THE DOG-LIKE TOOTH-SHELL.

This is a small Shell, or oblong conical Tube, of a white Colour, which incloses a Sea-worm. It is found on the Coasts of *England*, and is alkaline, absorbent, cordial, and astringent. There is another kind of *Dentale* found on the Coast of *Normandy*; which is no more, than a small Heap of Sand, in which a Worm hides itself. *Grossroy.*

It is not very much us'd in Medicine; but what Virtues it possesses, seem to be much the same as other testaceous Substances.

DENTARIA.

The Characters are,

It has a long Pod full of Seeds, which are, for the most part, round. When this Pod is ripe, its Valves are twisted into a spiral Form, and discharge the Seeds with Violence; the Root is squamous, fleshy, and denticulated, or cut in, as it were, with Teeth. *Boerhaave, Index alter, Pars* 2. p. 21.

*Boerhaave* mentions but one Species of this Plant, which is

*Dentaria*; heptaphyllos; baccifera. *C. B. Pin.* 322. *Rati Hist.* 1. 784. *Hist. Oxon.* 2. 254. *Tourn. Inst.* 225. *Elem. Bot.* 192. *Park. Theat.* 619. *Boerb. Ind. A.* 2. 21. *Dentaria*, *Offic. Ind. Med.* 65. *Dentaria, Viola Dentaria*, *Mont.* 42. *Dentaria heptaphyllos Clusu*, *Ger.* 834. *Emac.* 985. *Coralloides altera five septifolia*, *J. B.* 3. 899. *Coralloides septifolia, Dentaria heptaphyllos*, *Chab.* TOOTH-WORT.

It is frequently to be met with in the Botanic Gardens, and flowers in *April*. The Root is in Use, which is of a drying and astringent Quality. *Dale.*

DENTARIUS, *δονταρις*, is a Physician or Surgeon, who professes the Art of drawing and curing of Teeth. *Gal. ad Thrasylbul.* C. 24. where you meet too with *OCULARIUS* and *AURICULARIUS*, *ὀφθαλμικός καὶ ὠτίς*, an Eye-Doctor, and an Ear-Doctor.

DENTARPAGA, See DENTAGRA.

DENTES COLUMELLARES, in *Varro* and *Pliny*, are the same as *Varro* in another Place calls *DENTES CANINI*. *Castellus.*

DENTICULATA, *Boerhaave, Index alter*, is a Name for the *Moschatellina*, *Folii Fumariæ bulbosæ*. See *MOSCHAT-TELLINA*.

DENTIDUCUM, See DENTAGRA.

DENTIFRICIUM, *δοντιφρικιον*. A Medicine for rubbing the Teeth, and purging them from *Sordes*, and for cleaning and absterging the Gums when replete with Humours.

DENTILLARIA. A Name for the *Plumbago quorundam*. *Leadwort.*

DENTISCALPIUM, *δοντισκαλιον*. A Surgeon's Instrument for cleansing the Teeth from Filth; and in *Scultetus* it signifies an Instrument for separating the Gums from the Teeth, in order to their more convenient Extraction.

DENTITIO, *δοντισημα*, *Æginet. δοντισσις*, Dentition; the breeding the Teeth in Children; it differs from the *ὀδοντισμός* (*Odaxismus*) of *Galen*, and the *ὄδων ὀδοντισμός* of *Hippocrates*, which is the Itching of the Gums felt by Children in breeding their Teeth. *Blancard.*

DENTO. One whose Teeth are raised and prominent to an extraordinary Degree, or who is full-mouthed. *Blancard.*

DENUATIO, *γύμνωσις*, Denudation; is spoken of Bones, which appear uncover'd in a Fracture, or on any other Occasion.

DEOBSTRUENS, *ἀνασροματικός, ἐκκερκτικός*, deobstruent. A Quality of some Medicines, the same as *aperiens*, *aperient*. See *ANASTOMOSIS*.

DEON, *δίων*, from *δῖον*, it ought, is what is fit, proper, becoming, *Gal. C. de Artic. T.* 50. *Hippocrates* 1. *Aph.* 1. makes the *τὰ δῖοντα*, "Duties becoming the Station," incumbent as well upon the Patient and Attendants, as upon the Physician.

DEOPPIANTIA, *DEOPPILATIVA Medicamenta*, are aperitive or deobstruent Medicines. *Helmont, Aditus præclusi. ad Cond. Visc. Numb.* 3.

G F.

DEPASCENS,



**DEPASCENS**, νομώδης, is an Epithet of a putrid Ulcer, corroding and spreading itself over the adjacent Parts. It is more properly call'd *Phagedæna*, φαγιδæνα, and *Herpes excrēdens*, Gal. 6. Aph. 45. These Sorts of Ulcers are, by *Hippocrates*, call'd *Noma*; νομαί.

**DEPERDITIO**, ἀπορροή. The same as **ABORTUS**, which see.

**DEPHLEGMATIO**. The same as *Rectificatio*, and is a Term used by the Chymists, and apply'd to Liquids, particularly Spirits; when, by Distillation, or some other means, they are separated from their Phlegm.

**DEPILATIO**, μείδσις, μέδσις, φιλώσις. A Falling-off or Deflux of the Hair. *Hippocrates*, Lib. 1. 3. 6. *Epidem.*

**DEPILATORIUM**, φιλώθρον, is a Medicine which destroys the Hair, and of which there are three Kinds: The first are call'd *Psilothra*, or **DEPILATORIA**, by way of Eminence; others attenuate the grosser Hairs, and others wholly extirpate the Hair; which last are dangerous, because of their corrosive Quality. *Galen. de C. M. S. L. Lib. 1. Cap. 4.*

**DEPILIS**, ἀβελξ. See **ATHRIX**.

**DEPLUMATIO**, φιλώσις. An Affection of the Eyelids with a callous Tumor, which causes the Hairs to fall off. According to *Actius*, *Tetrab. 2. Sermon. 3. Cap. 78.* it is a Disease of the Eye, compounded of a *Madarosis* and a *Sclerophthalmia*.

**DEPREHENSIO**. The same as **CATALEPSIS**, which see. It has also the Signification of Diagnosis. *Scribonius Largus*, No. 183, 184.

**DEPRESSIO**, ἐσθλασις, Depression. The Word is often apply'd, as upon other Occasions, so particularly to an Injury of the Cranium, when the Bone is broken, and forced inwards upon the Meninges. It may be also express'd by *Impressio*, or *Introcessio*, Impression, or Introcession, according to *Filiolus* and *Scultetus*.

**DEPRESSOR**. A Name given to several Muscles. Thus there are the *Depressor Labii superioris*, describ'd under the Article **CAPUT**. The *Depressor Labii inferioris*. See **CAPUT**. The *Depressor Labiorum*. See **CAPUT**. The *Depressor Maxillæ inferioris*, which is the same as the *Digastricus*. See **CAPUT**. And the *Depressor Oculi*. See **OCULUS**.

**DEPRESSORIUM**. The Name of an Instrument, which is represented *Tab. 36. Fig. 7.* used for depressing the *Dura Mater*, after the Operation for the Trepan. See **CAPUT**.

**DEPRIMENS Auriculam**. The Name of a Muscle which depresses the external Ear. See **AURIS**.

**DEPURATIO**, Depuration, the same as Clarification, or Purification, is the Purging a Body of all the Lees, Fæces, and other gross, coarse, and excrementitious Parts. The Chymists by this Word mean an Exaltation.

**DEPURATORIA FEBRIS**. A Fever thus call'd by the illustrious *Sydenham*, which prevail'd much in the Years 1661, 1662, 1663, and 1664. This, says he, seems to be the only one, as far as I could hitherto observe, in which Nature regulated all the Symptoms in such a manner as to fit the febrile Matter, prepared by proper Concoction, for Expulsion, in a certain time, either by a copious Sweat, or a freer Perspiration; and, upon this account, I call it the *Depuratory Fever*. And, in reality, I am inclined to believe, that this is the capital and primary Fever of Nature, as well with respect to the regular Method which Nature uses in promoting and accomplishing the Digestion of the morbid Matter at the appointed Time, as also because it occurs more frequently than other Fevers; and it seems reasonable to think, that the necessary and excellent Rules left us by *Hippocrates*, and other antient Physicians, are adapted to this primary Fever; by means of which it is to be regulated in such a manner, that the febrile Matter may be prepared to make a proper Crisis by Sweat.

Besides the Symptoms which accompanied other Fevers, the present Fever had these in particular: A great Anxiety and Faintness, Vomiting, a dry and black Tongue, great and sudden Loss of Strength, a Dryness of the external Parts, the Urine constantly either turbid or thin, both of them here equally Signs of Crudity; a Looseness in the Decline, (unless the Physician happen'd to prevent it, by taking proper Measures in the Beginning) whereby the Disease was prolonged, and render'd more obstinate; but, in its own natural Course, it seldom lasted above fourteen or one-and-twenty Days, when it went off with Sweat, or rather a gentle Moisture; nor did any proper Signs of Concoction appear before in the Urine, but at this time they generally did.

Other Symptoms also arose, when this Distemper was unskillfully treated: However, not only these, but the Nature of the Distemper itself, will more clearly appear from the particular Method which I formerly adapted to this Fever, and which I shall here specify; tho', at that time, I was not aware of there being any other Species of Fever in Nature.

My first Observation is, That the irregular Commotion rais'd by Nature in the Blood, either as a Cause or Concomitant of this Fever, is excited, in order to separate from it a certain heterogeneous Matter contain'd therein, and prejudicial thereto; or else to change the Blood itself into a new State.

And here I rather chuse to make use of the general Word *Commotion*, than Fermentation or Ebullition, in order to prevent all fruitless Disputes about Words, which might arise from the Use of those, which, tho' they may seem harsh and metaphorical to some; are capable of a commodious Interpretation. For tho' the Commotion of the Blood in Fevers, at different times, resembles the Fermentations and Ebullitions of vegetable Liquors; yet there are those; who think this Commotion very different from both, in more respects than one: For Example, they say, fermenting Liquors acquire a vinous Nature, so as to afford an inflammable Spirit by Distillation, and to be easily convertible into Vinegar, which yields an acid Spirit by the same Treatment; yet neither of these Changes have been hitherto observed in the Blood. Again, Fermentation and Depuration are both carried on, at one and the same time, in vinous Liquors; whereas the Depuration of the Blood in Fevers does not accompany, but follow the Excretion; as appears, even to the Eye, by the Solution of a Fever-fit by Sweat.

As to Ebullition, this Analogy, they say, is still more foreign, and, in many Cases, contrary to Experience, where the Commotion of the Blood is too gentle to deserve the Title of Ebullition. But, not to engage in these Controversies, since the Terms *Fermentation* and *Ebullition* have prevail'd among modern Physicians, I likewise have not scrupled to use them occasionally, meaning only to convey my Thoughts more easily thereby. Moreover, that this febrile Commotion of the Blood is rais'd by Nature, in order to separate an heterogeneous and noxious Matter, appears from eruptive Fevers, in which an excrementitious Matter of a vitiated Quality, that lay conceal'd in the Blood, is, by means of the Ebullition, thrown out upon the Skin.

Nor is it less clear to me, that a febrile Commotion of the Blood often tends only to introduce a new State of that Fluid; and that a Man, whose Blood is pure and untainted, may be seiz'd with a Fever; for Fevers frequently appear in healthy Bodies, where there was before no previous Indisposition, either from a Plethora, Cacoehymia, or tainted Air, that could give Rise thereto. Yet, even in these Cases, upon some remarkable preceding Change of the Air, Diet, and others of the Non-naturals, a Fever presently arises, upon account of the Blood's affecting a new State, or Disposition, such as this Air and Diet require; and not because the Irritation of vitiated Particles, latent in the Blood, brings on the Fever: Tho' I make no Question, but the Matter regularly discharged in the Despumation of the Blood, after the febrile Commotion, may prove vitiated, tho' the Blood before was in a good State; which is not more strange, perhaps, than that some Parts of our Food should corrupt, and become fetid, after having undergone a remarkable Alteration in the Body, and been separated from the rest.

With respect to this Disease, I judge, that the genuine Indications are, to keep the Commotion of the Blood within such Bounds as suit the Design of Nature, so as to prevent its rising too high, on the one hand, whence dangerous Symptoms might follow; or sinking too low, on the other, whereby either the Exclusion of the morbid Matter might be hinder'd, or the Endeavour of the Blood, affecting a new State, be frustrated. And hence, whether the Fever be owing to the Irritation of any heterogeneous Matter, or to the Blood's attempting a new Change, the Indication of the Distemper will, in either Case, be the same; and, upon this Foundation, I proceed to the Cure in the following Manner.

When the Blood is weak, as it generally is in Children, or wants its due Proportion of Spirits, as in declining Age, or even in young Persons worn out by a lingering Illness, I refrain from Bleeding: Otherwise the Blood, being already too weak, even without taking any of it away, might prove absolutely unequal to the Business of Despumation; whence the whole Mass becoming corrupted, Death might easily ensue. Thus a hasty Check can scarce be put to the Fermentation of Wine, without injuring the Liquor; for Nature cannot bear the corrupted Particles she once began to throw off, which, tho' they were pure, whilst equally mix'd with the Blood, now strongly tend to taint the rest of the Juices. I am well aware, however, that, where Bleeding has been imprudently put in Practice, the Patient may be sometimes saved by means of proper Cordials, and the Blood reduced to a proper Temper for performing the necessary Despumation; but Prevention is preferable to a Cure.

When the Blood happens to be of a contrary Disposition, as it usually is in young Persons of a strong and sanguine Habit, I esteem Bleeding the first Step to the Cure; and that it is not to be omitted without Danger, except in the Cases hereafter mention'd; for, without it, not only Delirium, Phrenies, and the like Disorders, from Inflammation, might arise from too great an Effervescence of the Blood; but also the Circulation might be obstructed, or the whole Mass, in a manner, stagnate from its Excess in Quantity.

As to the Proportion, I usually take away no more than I conceive may prevent those Inconveniences, which might proceed from an immoderate Commotion of the Blood; afterwards regulating the Degree of Heat, by repeating or omitting Bleeding



ng occasionally, together with the free or sparing Use of warming Cordials; and, lastly, by promoting or checking the Stools, as I observe the Commotion to prevail or languish.

After Bleeding, where it was necessary, I carefully inquire, whether the Patient has had any Vomiting or Retching at the Beginning of the Fever; and, if he has, I order an Emetic; unless the tender Age, or some remarkable Weakness, of the Patient should contraindicate. Where a Retching has preceded, a Vomit is so necessary, that, unless the Humour be expelled, it produces several other different Symptoms, not easy to be removed in the Course of the Cure, and highly dangerous to the Patient. The principal and most common of these is a Looseness, which generally happens in the Decline of the Fever, if Emetics were omitted, when they were indicated; for, in the Progress of the Distemper, when Nature has, in some degree, subdued the malignant Humour in the Stomach, and thrown it lower, it, by its Acrimony, and the constant Supply derived from above, so corrodes the Intestines, that a Looseness must necessarily follow. I have, however, observed, in such inflammatory Fevers as are commonly call'd malignant, that, tho' a Vomit has been omitted, when Retchings at first appear'd, yet a Diarrhœa does not necessarily follow, as it did in the present.

Now the Danger of this Diarrhœa lies here, that it farther debilitates the Patient, already sufficiently weaken'd by the Disease; and, what is still worse, happens in the Decline of the Fever, when the Blood ought to collect itself, and exert its Force to finish the Business of Depuration, but is hinder'd by this Evacuation.

What makes it still plainer, that this Humour lodged in the Stomach, if not discharged by a Vomit, may bring on a Looseness afterwards, is, that, upon Examination, we scarcely find any Instance of a Looseness attending this Fever, but where the Patient was inclined to vomit at the Beginning, and an Emetic was not given; as, on the other hand, tho' this Inclination to vomit be over, yet the Looseness generally stops, upon giving a Vomit, provided the Patient be strong enough to bear it: And I have frequently observed, that, upon the coming on of a Looseness in this Case, Astringents, either internally or externally given, have very little, if any, Effect in stopping it.

The Emetics I generally used were of this Kind:

Take of the Infusion of Crocus Metallorum, otherwise call'd Vinum Benedictum, six Drams; Oxy-mel of Squills, and compound Syrup of Scabious, each half an Ounce: Mix them for a Vomit.

I directed it to be given in the Afternoon, two Hours after a light Dinner; and, to make it work the safer and better, I order'd three Quarts or a Gallon of Posset-drink to be in Readiness, because this kind of Emetic is dangerous, unless plentifully diluted; and, therefore, as often as the Patient vomited or purged, he was directed to take a Draught of the Posset-drink; by which means Griping was prevented, and the Vomiting render'd more easy.

When I have sometimes happen'd carefully to examine the Matter here thrown up by Vomit, and found it neither considerable in Bulk, nor of any remarkable bad Quality, I have been surpris'd how it should happen, that the Patient has been so much relieved thereby; for, as soon as the Operation was over, the severe Symptoms, such as the Nausea, Anxiety, Restlessness, deep Sighing, Blackness of the Tongue, and the like, usually abated, and went off, so as to leave the Remainder of the Disease more tolerable.

I must here remark, that, in Fevers and the Small-pox, there is much Reason to believe, that the more modern Practice has very injudiciously substituted Ipecacuanha in the room of antimonial Vomits. These last operate more roughly than the former; but at the same time, as I have frequently observed, afford more Relief.

We should not omit, that, if the State of the Patient requires both Bleeding and Vomiting, it is safest to bleed first, and give the Vomit afterwards; otherwise there would be Danger, that, whilst the Blood-vessels are greatly distended, the violent Motion in Vomiting might burst the Vessels of the Lungs, or hurt the Brain, and occasion a Vomiting of Blood, or a mortal Apoplexy: Of which I could give some Instances, if it were proper; but my Design is only to give Caution.

As to the Time of giving a Vomit, I would have it done at the Beginning of the Fever, if possible, in order to prevent those terrible Symptoms arising from a Collection of Humours in the Stomach, and Parts adjacent: And thus, perhaps, the Distemper may be crush'd in its Infancy, which might otherwise increase, and prove both obstinate and dangerous, whilst supplied by these Humours, which, entering into the Recesses of the Body, may mix with the Mass of Blood; or, growing more corrupted by longer Continuance, communicate a malignant Quality thereto. We have an Instance of this in the

*Cholera*; where, if we unseasonably endeavour to stop the Vomiting, whether by Laudanum or Astringents, and the Attempt succeeds, we sometimes bring on a no less dangerous Train of Symptoms: For the acrimonious and corrupted Humours, which ought in some measure to be discharged; being by this means detain'd, exert their Force upon the Blood, and raise a Fever, which usually proves of a bad Kind, and is accompanied with dangerous Symptoms, so as scarcely to be removed, without giving a Vomit; even tho' the Patient has then no Tendency to such an Evacuation.

But if, as it frequently happens, the Physician is call'd so late, that a Vomit cannot be given at the Beginning of the Fever; yet I should judge it proper to give one at any time of the Distemper, provided the Patient is not too weak to bear it. I have successfully order'd an Emetic on the twelfth Day of the Distemper, even tho' the spontaneous Retchings were over; and by this means have stop't the Looseness, which hinder'd the Blood from finishing its Depuration; and I should not scruple attempting the same later, if the Strength of the Patient permitted.

In the Evening, after the Operation, I always endeavour to quiet the Disturbance raised in the Juices by the Emetic, and to procure Sleep; and therefore direct a paregoric Draught to be taken, at Bed-time, after the following manner:

Take of the distill'd Water of red Poppies, two Ounces; Aqua-mirabilis, two Drams; Syrup of white and red Poppies, each half an Ounce: Mix the Whole for a Draught.

But if there be no Danger of raising too great an Effervescence, either on account of plentiful Bleeding, in the Course of the Cure, frequent Vomiting or Purging, from the Use of an Emetic, the present Disappearance of the Fever, its Mildness, or its natural Decline; then, instead of the Draught above set down, I give, without Apprehension of Danger, a sufficiently large Dose of Dioscordium, either alone, or mix'd with some Cordial-water: And this is an excellent Medicine, provided it be given in a due Quantity.

Under the Article of Vomits, we should not omit to observe, that it is by no means safe, at least in this Fever, to give such as are made with the Infusion of Crocus Metallorum, even in the smallest Quantity, to Children under the Age of Fourteen. It were, indeed, to be wish'd, that, instead of this Emetic, we had others of a safer Kind, yet so sufficiently efficacious, as thoroughly to discharge the Humour, which, in the Decline of this Fever, generally brings on a Looseness; or, at least, that we were possess'd of some proper Remedy for changing or dissolving this corrosive Matter, and blunting its Force, so as to hinder it from producing a Diarrhœa. It has often been a Difficulty with me, when call'd to Infants and Children in a Fever, and observing an Emetic indicated, whereby they might have been preserved from Danger, that I durst not give this Infusion, for fear of bad Consequences; but, in grown Persons, I have hitherto found no ill Effect from it, provided it were given with the Caution above-mention'd.

When the Affair of Vomiting is over, I next consider,

1. Whether, notwithstanding the preceding Evacuations, the Blood may not still hurry on so fast, as to require a Check. Or,

2. On the other hand, whether it may not languish so much as to require quickening. Or, lastly,

3. Whether the Fermentation is now brought to such a proper State or Degree, as that it may be safely left to itself.

Something must be said to each of these Cases.

1. If the Blood hurries on so fast, as to give a just Suspicion of a Delirium, or other bad Symptom, coming on, the Day after the Emetic I generally prescribe a Clyster:

Take of the common Decoction for Clysters, one Pint; Syrup of Violets, and brown Sugar, each two Ounces: Mix them for a Clyster.

This Clyster I order to be repeated occasionally; by which means the Blood is often so refresh'd and cool'd, as sufficiently to check its Effervescence. It sometimes, likewise, becomes necessary to repeat Bleeding once or twice, as particularly in Persons of a very sanguine Constitution, and in the Vigour of Life, or such as have inflamed their Blood by using Wine too freely; tho' there is seldom Occasion for so capital a Remedy as repeated Bleeding; and, therefore, Clysters may suffice to check the Effervescence, except in the Case just now mention'd. If, therefore, the Effervescence of the Blood be too high, I order a Clyster to be injected, either every Day, or every other Day, as the Case requires; and this I continue to do, till about the tenth Day of the Distemper.

But, when a large Quantity of Blood has been taken away, or the Patient is in Years, I, at this time, order no Clyster, tho' the Effervescence of the Blood should be considerable; for, in these Cases, as we need not fear its rising so high, without the



the Use of Clysters, as to bring on any great and dangerous Symptoms; so, on the other hand, it is certain, that the Strength and Texture of the Blood may be so impair'd and relax'd by the Use of them, as to disturb and hinder the Procedure of Nature, especially if the Patient be in Years; for Clysters do not succeed so well in the Old, as in the Young. But if only a little Blood has been taken away, then, as was said before, I continue the Use of Clysters to about the tenth, and sometimes to the twelfth Day, as, particularly, when I durst not bleed at all: For some Persons are seiz'd with a continual Fever, after an autumnal Intermittent, whether tertian or quartan, from a Want of Purging at the Close of the preceding Distemper; and, if Blood should be taken away in this Case, there is Danger of the Sediment, deposited in the former Fermentation, being reabsorb'd into the Mass of Blood, and occasioning fresh Disorders. Instead of Bleeding, therefore, in such Cases, I continue to use Clysters to the twelfth Day, if the Patient be young, and the Fermentation too violent.

2. On the other hand, whether Bleeding has been used or not, if the Effervescence of the Blood sinks too low, and requires raising, in order to assist Nature in her Work, in this Case I judge, that no Clyster should be injected, even before the tenth Day, and much less afterwards; otherwise we might thus farther check the Fermentation, now already too languid of itself. But to use Clysters after this time, that is, in the Decline of the Distemper, would be as absurd as to stop the Fermentation of Wine, before the Despumation was perform'd, by opening a large Vent-hole; for a Clyster here would hinder Nature in her vigorous Endeavour to throw off the morbid Matter.

But, when once the Patient is out of Danger from those Symptoms arising from too great an Ebullition, either by means of proper and seasonable Evacuations; or because the Disease begins to decline spontaneously, the more collusive he is kept, the more secure I judge him, the febrile Matter then proceeding more kindly and gently to Concoction. And, therefore, if the preceding Evacuations should either actually dissolve, or tend to dissolve, the Mass of Blood, or the Fever go off before its due Time, or should have arrived at its full Period, I not only refrain from the Use of Clysters, but also call in the Assistance of Cordials, and directly endeavour to prevent a Purging.

Cordials, as I have experienced, when given too soon, do Mischief; and, unless Bleeding has preceded, may drive the crude Matter of the Distemper upon the Membranes of the Brain, or the Pleura; and, therefore, I never give them, when either no Blood, or very little, has been taken away; or when no other considerable Evacuation has been made; or the Patient has not pass'd the Meridian of Life: For, whilst the Blood remains rich enough of itself, it should not be more enrich'd to the endangering the Patient; nor does it require to be raised, so long as no remarkable Evacuations have diminish'd its natural Heat. Such kind of Patients have Cordials within them, which render external ones either superfluous, or prejudicial; and, therefore, I here either use none at all, or those of the weakest Sort.

But, if the Patient should be greatly weaken'd and dispirited by copious Evacuations, or be in the Decline of Life, I usually allow of Cordials, even in the Beginning of the Fever; and on the twelfth Day, when the Business of Separation is at hand, I judge a freer Use of the hotter Remedies allowable; and they might be given earlier, if there is no Danger of the febrile Matter's falling upon the principal Parts; for, at this time, the more the Blood is heated, the more the Business of Concoction is promoted.

I cannot imagine what Physicians mean by their frequent Precepts for giving Remedies to promote the Concoction of the febrile Matter, which they often talk of, in the Beginning of the Distemper; tho', at the same time, they order only such Medicines as may moderate the Fever: For the Fever itself is no other than the Instrument of Nature, by means whereof she separates the vitiated Parts of the Blood from the sound; tho' she does this in a manner perfectly imperceptible at the Beginning, and even at the State, of the Distemper; but more manifestly in the Decline thereof, as appears from the Sediment in the Urine. The Concoction of the febrile Matter, here, means no more than a Separation of the morbid Particles from the healthy; whence the Way to hasten this Concoction is not by moderating the Fever, but the Effervescence must be kept up so long as the Safety of the Patient will give Leave: But, when the Disease is in the Decline, and the Separation becomes manifest, warmer Medicines should be immediately given, in order to finish the Operation with greater Certainty and Expedition: And this is properly promoting the Concoction of the febrile Matter; whereas I have frequently found, that Evacuations and Coolers hinder the Cure, and retard the Recovery, which was now approaching. But, if the Fermentation advances sufficiently, Despumation will be perform'd about the fourteenth Day; whereas if Coolers are given too late, so as to check the Effervescence, 'tis no Wonder if the Fever runs on

to the twenty-first Day, or even much longer, in Persons extremely weaken'd with improper Treatment.

It is remarkable here, that, tho' the Patient may sometimes seem to be a little relieved by the Use of Clysters, or other Purgatives, unseasonably directed, about the Decline of the Distemper, and even, perhaps, to be totally freed from the Fever; yet, a Day or two after, it happens, that the former Fever does not so much appear to return, as a new one to arise; for Chills and Shivering presently come on, and are soon follow'd by Heat, and a Fever; which, unless it happens to degenerate into an Intermittent, runs its Course as already describ'd. In this Case, the Patient is to be treated in the same manner as if he had not had the Fever before; for, tho' it be an afflicting Consideration to the weaken'd Patient, the Depuration, consequent upon this new Effervescence, will not be perform'd in less than fourteen Days.

I shall next set down the Cordials which I generally use in this Distemper, the milder of which I employ at the Beginning, when the Ebullition is violent; and gradually proceed to the hotter, according as the Fever, or the Degree of Ebullition, requires; always observing, where Bleeding was freely used, or the Patient was in Years, to administer those of a stronger Kind, than when no Blood had been taken away, or the Patient was in the Vigour of Life.

The milder Cordials I mean, are such, for Example, as are made of the distil'd Waters of Borrage, Citrons, Strawberries, the compound Scordium-water, with a Mixture of the Syrup of Baum, Cloves, or of the Juice of Citrons, and the like. But the stronger are *Gascoign's* Powder, Bezoar, Confection of Hyacinth, *Venice* Treacle, with others of the same Kind. The following Prescriptions were frequently used:

Take of the distil'd Waters of Borrage, Citron, black Cherries, and compound Scordium-water, each two Ounces; Barley Cinnamon-water, one Ounce; prepared Pearls, two Drams; fine Sugar, two Ounces, or a sufficient Quantity: Mix them together. Take four Spoonfuls of this Mixture often in a Day, especially when faint.

Take of the distil'd Waters of the whole Citron, and Strawberries, each three Ounces; *Aqua Cordialis frigida Saxoniæ*, one Ounce; Treacle-water, Syrup of Baum of *Fernellius*, and of the Juice of Citron, each half an Ounce: Mix them for a Julap, some of which is to be taken frequently.

Take of *Gascoign's* Powder, Oriental and Occidental Bezoar, and *Lapis Contrayerva*, each a Scruple; a single Leaf of Gold: Reduce the Whole to a fine Powder, of which take twelve Grains, as often as there shall be Occasion, in Syrup of the Juice of Citron, and Cloves, each two Drams; drinking after it a few Spoonfuls of the Julap above directed.

Take of Treacle-water, four Ounces; the Seeds of Citron, two Drams: Beat them together, and make an Emulsion. To the strain'd Liquor add Sugar, enough to sweeten it to the Taste. Take two Spoonfuls of it thrice a Day.

It would be superfluous to add any more Forms of Medicines, because a larger Number are, or may be, of Use in the Course of the Distemper, and require to be varied according to its different Stages, and the different Symptoms arising therein.

But when the Fermentation neither rises too high, nor sinks too low, I leave it in that State, without prescribing any Medicines, unless thro' the Importunity of the Patient, or his Friends; and then I direct such only as may satisfy, without doing any Injury.

I should not omit, that frequently, when I was call'd to Persons of low Circumstances, I order'd them to do nothing else, after Bleeding and Vomiting, when required, but to keep in Bed, during the whole Course of the Distemper, and to sup only Water-gruel, Barley-gruel, and the like; to drink moderately warm small Beer, to quench their Thirst; and to take a Clyster of Milk and Sugar every Day, or every other Day, till the tenth or twelfth Day of the Distemper; but towards the End of the Fever, when the Separation was begun, and proceeded slowly, to promote it, I allow'd them, now-and-then, a little stronger Malt-liquor, instead of Cordials. And thus, without any thing farther, except a gentle Purge at the End of the Distemper, they generally recover'd.

If the Method above deliver'd was carefully observed, I commonly, about the fifteenth Day, found it proper, from the laudable Separation in the Urine, and a manifest Abatement of all the Symptoms, to order a purging Potion to drain off the Sediment deposited upon particular Parts by the preceding Fermentation; and, unless this was seasonably done, that Sediment might return into the Mass of Blood, and occasion a Return of the Fever; or, by its Continuance in the Parts where it lodged,



lodged, produce obstinate Disorders in the Body: For, the Separation being over, the gross and vitiated Humours, transmitted from the Arteries to the Veins, easily prevent the Return of the Blood; whence various Kinds of Obstructions, and, at length, new Ferments, arise.

But it may be here observed, that Purging is not so necessary after vernal as after autumnal Fevers, because the Sediment deposited by the former is neither so copious, nor of such an earthy malignant Nature, as in the latter; which holds also in the Small-pox, and many other Distempers, which rage in the Spring; so that here, as far as I have observed, it is not so dangerous to omit Purging, as in the Cases before-mention'd. And it seems to me, that more Distempers arise from an Omission of Purging after autumnal Disorders, than from any other single Source.

If the Patient happens to be very weak, or the Depuration not perfectly perform'd, so as to render it unsafe to give a Purge on the fifteenth Day, I defer it to the seventeenth; and then prescribe the following, or a similar purging Potion, in proportion to the Strength of the Person:

Take of Tamarinds, half an Ounce; the Leaves of Sena, two Drams; Rhubarb, one Dram and a half: Boil them together in a sufficient Quantity of Water, so as to leave three Ounces, when strain'd off; in which dissolve Manna, and solutive Syrup of Roses, of each an Ounce: Mix the Whole for a purging Potion, to be taken in the Morning fasting.

I always order the Patient to keep his Bed, till he is purged; then permit him to rise, and, by degrees, return to his ordinary Manner of Living. The Diet I order, to this Time, is nearly the same with that above-mention'd, as Water-gruel; Barley-gruel; Panada made of Bread, the Yolk of an Egg, Water, and Sugar; thin Chicken-broth; small Beer; to which, when the Fever is high, a little fresh Juice of Oranges may be added, it being first just boil'd over the Fire, to take off the Crudity, with the like; tho' Water-gruel is the best of all. But to forbid the drinking of small Beer, in small Quantities, is an unnecessary Severity, and often pernicious.

It sometimes happens, especially in the Aged, that tho' the Fever is cured, and the Body, perhaps, rather too much purged, that the Patient still remains very weak; and, with coughing or spitting, expectorates a large Quantity of viscid Phlegm: A Symptom terrifying not only to the Patient, but also to the Physician, if not apprised of it, who might otherwise mistake it for a beginning Consumption; tho' I have found it no ways dangerous. In this Case, I order a Glass of old Malmsey or Muscadell Wine, with a Toast; which, by strengthening the Texture of the Blood, (weaken'd by the preceding Fever, and therefore render'd unfit to assimilate the Juices of the Aliment lately taken in) removes this Symptom in a very few Days, as I have found by repeated Experience.

By the Method here laid down, many Symptoms and Disorders will be prevented, usually attributed to Malignity; nothing being more common with Physicians, unskill'd in their Profession, than to cry out upon Malignity, when, by too cooling Remedies, or the unseasonable Use of Clysters, they have weaken'd the Texture of the Blood, and reduced Nature so low, whilst she was performing the Office of Separation, as to bring on Faintings, and other bad Symptoms, which are the genuine Effects of such perverted Rules of Art: But if the long Continuance of the Disease should wipe off this Asperion of Malignity, whatever afterwards obstructs them in the Cure, they impute to the Scurvy; tho', in reality, the Symptoms, which happen'd in the Height of the Disease, were neither owing to Malignity, nor those, which appear'd in the Decline, to the Scurvy; but both of them to wrong Management, as I have frequently observed. Not that I, or any other Physician, who is acquainted with the History of Diseases, will say, that there are no Fevers of a malignant Nature; for there are manifest Signs of such; nor will I deny, that a Fever may be sometimes complicated with a Scurvy, and other Disorders; but what I assert is, that both Malignity and the Scurvy are here frequently accused, without any Reason.

When the Fermentation of the Blood proceeds in a proper Manner, the Depuration of the morbid Matter will be finish'd in the Time above-mention'd; but if cooling Remedies, or Clysters, are given too late, the Fever will run to a much greater Length, especially in aged Persons, who have been improperly treated. When I have sometimes been call'd to such, after they had struggled with the Fever above forty Days, I have used my utmost Endeavours to procure the Depuration of the Blood, which was now so far weaken'd, partly by Age, and partly by Clysters, and cooling Medicines, that I could not obtain the End propos'd, either by Cordials, or any other strengthening Remedies; but either the Fever maintain'd its Ground, or, if the Patient seem'd free from a Fever, his Strength was almost quite exhausted.

But when other Means fail'd me, I have made use of a singular

Expedient with great Success, that is, the Application of the Heat of strong and healthy Men; nor will it be found surprising, that, by this uncommon Means, the Patient should be considerably strengthen'd, and debilitated Nature assisted, so as to disburden herself, and throw off the Remains of the morbid Matter; for it is easy to apprehend, that a considerable Quantity of sound wholesome Effluvia will thus pass from a robust, healthy Body into the exhausted Body of the Patient; and I have never found the repeated Applications of warm Napkins to prove near so serviceable as this Method, where the Heat applied is not only more natural to the human Body, but also more mild, moist, equable, and constant. And this Way of transmitting, perhaps, balsamic Spirits and Exhalations into the Body of the Patient, has also since been successfully us'd by others. Nor do I think it below me to mention this Expedient; whatever Censure may be pass'd upon me for it by such as despise whatever is vulgar, because, I think, the Health and Benefit of Mankind ought to be prefer'd to their false Opinion of things.

By carefully pursuing the Method hitherto deliver'd, the greater Part of the bad Symptoms, which either accompany or follow upon this Fever, will be prevented; which otherwise, in the Course of the Cure, frequently perplex the Physician, and prove fatal to the Patient, tho' the Disease itself should have no such destructive Tendency. But, as such Accidents are common, if the Physician comes too late, be negligent, or unskillful, I will here briefly treat of the Cure of those Symptoms, which, when they happen, require a peculiar Treatment, tho' they might generally have been prevented, by keeping close to the above-mentioned Method.

And, first, if a Delirium be occasion'd, either by the early and unseasonable Use of heating Medicines, or the Patient's being naturally of a hot Constitution; or, which is nearly the same, if he has constant Watchings, speaks hastily, looks wild, drinks his Medicines or other Liquors eagerly, or has a Suppression of Urine; in this Case, I bleed more freely, order Glysters, and cooling Medicines, particularly in the Spring; at which time, such as are young and florid, tho' free from this Symptom, may be treated in the same manner, without much Danger.

By these Means I endeavour to support the Patient, till the Disease has run to a certain Length; when I find it easy to take off both that and the Delirium by a large Dose of some Opiate: For Anodynes, properly given in the Decline, are very beneficial; whereas they prove of no Service whilst the Fever is high, tho' given in the largest Dose, as being unable to stop the violent Course of the Fermentation; but principally because the peccant Matter, then equally mix'd with the Blood, and not ripe for Separation, is confin'd; whence the expected Depuration is hinder'd. Whether this be the Reason of the thing, or it proceeds from some more latent Cause, I leave to the Determination of others.

This, however, I can affirm from numerous Observations, that Laudanum, or any other Narcotic, us'd to take off this Symptom, whether in the Beginning, Increase, or Height of this Fever, was either ineffectual, or prejudicial; whereas a moderate Dose in the Decline proved successful. I once order'd a Narcotic upon the twelfth Day of the Disease with Success; but never knew it given sooner to Advantage; and, if it be defer'd to the fourteenth Day, when the Separation is more perfect, it will prove still more beneficial; for I have frequently observ'd, that the Delirium may be disregarded, till it is proper to give an Opiate, provided the Disorder be not increas'd by the Use of Cordials, and heating Medicines, which may here prove mortal. The Opiates I usually prescribe, are either *London* Laudanum to a Grain and a half, or the following:

Take of Cowslip-flowers, one Handful; boil them in a sufficient Quantity of black Cherry-water to leave three Ounces, when strain'd off; to which add Syrup of white Poppies, half an Ounce; Juice of Lemons, half a Spoonful: Mix the Whole together. Or,

Take of black Cherry-water, one Ounce and a half; Plague-water, two Drams; liquid Laudanum, sixteen Drops: Mix them together.

It may be proper to add, that if this Symptom be not very urgent, and the Fever be prolong'd, so as that the Patient may be safely purg'd before an Opiate is given, it will then be attended with greater Success; and therefore I usually direct two Scruples of the Pil. Cochine, dissolv'd in Betony-water, to be taken ten or twelve Hours before the Opiate; and thus the Disturbance this warm Purgative might otherwise occasion, will be prevented by the Opiate, and an agreeable Sleep procur'd. But, if the Watching continues, after the Fever, and the other Symptoms, are gone off, I have known a Piece of Linen dipt in Rose-water, and applied cold to the Temples and Forehead, prove of greater Service, than any kind of Opiate.

'Tis usual for the Patient to be afflicted with a bad Cough during



during the whole Course of the Disease, arising from the violent Commotion of the Blood; whereby the Juices, being broke, are separated from the Mass, in its Circulation thro' the pulmonary Vessels, and thrown upon the internal Membrane of the Trachea, which is of a fine Texture, and extremely sensible. The Cough is first dry, the Matter being then too thin to be expectorated; but the febrile Heat gradually thickens it, and soon renders it more tenacious; whence it is, with Difficulty, expectorated, and becomes subject to cause a Suffocation, for want of sufficient Strength in the Patient to discharge it. In this Case, I seldom use any other Medicine, than fresh-drawn Oil of sweet Almonds, unless, as it sometimes happens, the Patient has an Aversion to Oil; and, if so, I endeavour to relieve him by the common Pectorals. Otherwise, I prefer the Oil of Almonds to all other pectoral Medicines, principally because that, to answer any Intention, these must be given freely, and in large Quantities; whereby the Stomach, already too weak, and subject to Retchings, is overcharged; and, besides, we are sometimes, by this means, prevented from giving what is proper upon other Accounts.

Again, neither Reason nor Experience have yet convinced me, that the Use of this Oil is not to be allowed in Fevers, because it is of an inflammable Nature, and consequently may tend to increase the Distemper; for, granting it to be naturally hot, 'tis however certainly not so hot, but that the Advantages arising from its Use are greater than the Inconveniencies; for it is an excellent Pectoral, opens and lubricates the Passages, thereby promoting Expectoration, which, when copious, frees the Blood from the noxious Humour, now seasonably separated, and at the same time tends to cool; so that this Symptom thus proves of considerable Service; for which Reason I am not anxious about it. Let it, however, be observed, that 'tis unsafe to give several Spoonfuls of Oil of Almonds at once, as Retchings, and a Looseness, may thereby be occasioned; but the frequent Use of it in small Quantities, throughout the Day and Night, not only eases the Cough, by promoting Expectoration, but, which is very material, the Patient, now almost worn out, is, in some measure, recruited by this kindly Nourishment.

Sometimes a Bleeding at the Nose happens, either from giving too warm Medicines in the Beginning of the Fever, or from not sufficiently depressing the Ebullition of the Blood, the Patient either being in the Prime of Life, or the Season of the Year conspiring with the Fever. Here the Means commonly made use of to check the Motion of the Blood will be of little Service; such as Bleeding, Ligatures, astringent, agglutinant, and balsamic Remedies, tho' Recourse may be had to these and the like Helps, according as they shall be judged proper; but the principal thing is, to stop the violent Ebullition of the Blood by a proper Medicine, tho' in reality, if this Symptom be considered apart, the Remedies above-mentioned, and particularly Bleeding, should seem to be serviceable therein; nor have I scrupled to use them: Yet, as they do not (Bleeding excepted) strike sufficiently at the Cause of this Symptom, that is, the Ebullition of the Blood, 'tis imprudent to depend upon them. Therefore, in this Case, when all other Means had proved ineffectual, I usually gave the following Draught:

Take of the distill'd Waters of Plantain, and wild Poppies, each an Ounce and a half; Syrup of white Poppies, six Drams; Syrup of Cowslips, half an Ounce: Mix them together for a Draught.

But I judge it improper to put an immediate Stop to every Haemorrhage after this manner; for it is frequently rather to be permitted; and may prove of great Service, sometimes by abating the too violent Ebullition of the Blood, and at others, by proving critical, put an End to the Disease. And, in reality, no considerable Effect is to be expected from the above-mentioned Medicine, unless the Symptom has continued some little time, and Bleeding in the Arm preceded its Use. Again, it must be carefully remark'd, that this, and all other moderate Haemorrhages, are peculiarly apt to return soon after a Stop has been put to them, unless a gentle Purge be given; which therefore must not be omitted, even tho' it should seem too early to purge with respect to the Stage of the Fever, if this Symptom had not happened.

The Hiccup generally happens to the Aged, after an immoderate Looseness, but principally after excessive Vomiting, and frequently prognosticates imminent Death. I ingenuously own, that I have not been able to satisfy myself in my Inquiry into the Cause of this Symptom; but I have frequently observed it to arise from some Disturbance raised in the Stomach, and adjacent Parts, by violent Medicines, not without great Danger to the Patient; because Nature is unable to check and quiet this Commotion: And on this account I judged it proper to assist her by Art, by giving a large Dose of Diacordium; for Instance, two Drams; which seldom fail'd to remove this Symptom, when the Seeds of Dill, and other celebrated Specifics, had proved ineffectual.

If, as above intimated, a Looseness should happen in the Course of the Disease, for want of giving a Vomit at the Beginning, when it was indicated by the Retchings, one should be given at any time of the Disease, provided the Patient be strong enough to bear it, even tho' the Tendency to that Evacuation has, for some time, ceased. But, as this has been largely treated of before, I shall only mention what is proper to be done, if a Looseness should happen, notwithstanding an Emetic has been given; which is very seldom the Case, except in an inflammatory Fever, where this Symptom, so far from being prevented, is sometimes occasioned by a Vomit; which is an Observation of Consequence. And here I have found the following Glyster more efficacious, than any other Astringents:

Take of the Bark of Pomegranates, half an Ounce; red Roses, two Pugils: Boil them in a sufficient Quantity of Milk, so as to leave half a Pint of strain'd Liquor, in which dissolve half an Ounce of Diacordium: Mix the Whole for a Glyster.

'Tis improper to inject a larger Quantity of this Glyster than is here directed, tho' it be naturally astringent; because the Intestines may be oppressed by its Bulk, whence the Looseness will rather be promoted than checked.

But it may be said, that, if a Diarrhoea should appear, especially in the Decline of the Disease, it is better to encourage than stop it, as it is sometimes a critical Discharge, and terminates the Distemper. This undoubtedly may sometimes be the Case; but it happens so rarely, as not to encourage one to attempt it: Besides, the Reason before alledged, in treating of the Cure of Fevers in general, which tends to shew the Necessity there is of stopping the Flux, holds here also. And to this may be added, that, in order to the genuine Depuration of the Blood, it is not only necessary there should be a Secretion of some feculent Parts, but there is further required a Separation of others by way of Efflorescence, as we daily see in other rich and heterogeneous Liquors. Consequently, if the Looseness be too much promoted, the Depuration will not be wholly completed, and perhaps the Matter, which ought to have been last expel'd, will pass off first. I own indeed, that after the Separation by way of Efflorescence is finished, which is usually performed gradually and insensibly, and by means of a freer Perspiration, rather than of a manifest Sweat, if then a Looseness should happen, it would be attended with little Danger: For it must be observed, that now it is only owing to a Neglect of purging in time; whence the Excrements, for want of being evacuated, contracting a kind of malignant Ferment, irritate the Intestines to discharge their Contents: Besides, the very liquid Consistence of the Excrements is a Proof, that the Looseness ought not to be accounted a critical Solution of the Disease.

Possibly the Iliac Passion deserves to be enumerated among the Symptoms consequent upon Fevers, since it is sometimes occasioned by immoderate Vomiting in the Beginning of the Disease. This terrible Disorder proceeds only from the inverted peristaltic Motion of the Bowels, whose natural Formation is such, as, by their many Folds, to promote the Descent of the Faeces in the properest Manner; and therefore, whenever they are forced to yield to a Motion opposite to that of their Fibres, a pungent Pain is occasioned, which remains fix'd upon a particular Part, when either the Valve placed at the Beginning of the Colon, to prevent the Return of the Excrement into the Ileum, or any other Membrane belonging to the Cavity, singly sustains the Force of this preternatural Motion. This inverted Motion, productive of the Pain, may proceed either from Obstruction or Irritation.

It is manifest, that whatever blocks up the Passage of the Intestines, must occasion this contrary Motion in them; and this may happen, according to Authors, from harden'd Excrements; from Flatulencies collected in the Bowels, and, as it were, purging them up; from Strangulation on account of a Rupture; from Inflammation; and lastly, from large Swellings filling up their Cavity. However, 'tis plain, that the inverted Motion, proceeding from these Causes, is rather to be accounted the Motion of the Aliment taken in, than of the Intestines themselves; nor is it an Inversion of the Motion of the whole Duæ, but of those Parts only, which are situated above the Seat of the Obstruction; for which Reason I call it the spurious Iliac Passion.

I conceive the Inversion of the peristaltic Motion generally proceeds from acrid and peccant Humours being deposited in the Stomach and adjacent Intestines, from the violent Fermentation of the Blood in the Beginning of the Fever, whereby the Motion of the Stomach is first inverted, and its Contents thrown up with Violence; and then the small Guts, which are contiguous to it, being weaken'd, yield to the violent Motion of the Stomach; and at last the large Guts are also made to sympathize with them. This is the true Iliac Passion, and the Disorder under Consideration. The Method of curing it has hitherto remain'd a Secret, notwithstanding the Pretensions of such as have had recourse to Quicksilver, and leaden Bullets, which do little Service, and are frequently very dangerous.



# D E S

As soon as it appears, from Glysters being vomited up, and other Signs, that the Disease is a true Iliac Passion, I endeavour to answer these three Intentions :

1. To put a Stop to the inverted Motion of the Stomach ; which produces the same in the Intestines.

2. To strengthen the Intestines, weaken'd by the sharp Humours. And,

3. To free the Stomach and Bowels from these sharp Humours.

I. I direct a Scruple of Salt of Wormwood, with a Spoonful of Lemon-juice, to be taken Morning and Night ; and, in the Intervals, give some Spoonfuls of Mint-water by itself twice every Hour ; by the repeated Use of which the Vomiting and Pain may be soon remov'd.

II. At the same time I order a live Puppy to be applied to the Belly, till the following Purgative is given.

III. Two or three Days after the Pain and Vomiting are gone off, I give a Dram of the greater Pil. Cochiae dissolved in Mint-water, and direct Draughts of Mint-water to be frequently taken during the Operation of the Purge, in order to prevent the Return of the Vomiting.

I have observ'd, that 'tis in vain to give this, or any other the strongest Kind of Purge, before the Stomach be strengthened, and reduced, together with the Intestines, to its natural Motion ; for otherwise all Cathartics will prove emetic, and consequently be more prejudicial than serviceable : And this Reason induced me to forbear Purgatives, till I had first used Stomachics a while.

The Diet I direct is very sparing ; for I allow the Patient only to sup some Spoonfuls of Chicken-broth twice or thrice a Day, and confine him to his Bed during his Illness, and till the Signs of Recovery appear, directing him to continue the Use of the Mint-water for a considerable time after the Cure, and to keep the Belly warm, by wearing a double Flannel ; whereby a Relapse may be prevented, which happens more frequently in this than any other Disease.

In these few Particulars consists my whole Method of curing this Disease ; which, 'tis hoped, no one will deliberately condemn on account of its Simplicity, and the Want of Elegance of Language, and the Pomp of Medicine, to recommend it.

Thus I have enumerated the Symptoms that usually happen in this Fever ; but there are others I shall not now mention, as they are of less Moment, and require no particular Treatment, but go off spontaneously, if the Fever be skilfully treated. And let this suffice for the continued Fever of this Constitution, with its Symptoms. *Sydenham.*

DERAS, *δέρας*, a Sheep-skin, is the Title of a Book in Chymistry, treating of the Art of making Gold of baser Metals, *Langius, Lib. 1. Ep. 53. Theat. Chym. Vol. 1. p. 19. Libavius, T. 3. p. 211, 234.* The Reason of the Name is, because *δέρας χρυσόμυλλον* is the Sheep-skin which bore the golden Fleece, which, *Suidas* says, was a Book written on Parchment, or Sheep-skins, teaching the Art of making Gold.

DERBIA. A Name given by some Surgeons to the *Impetigo*. *Castellus.*

DERIS, *δέρμα*, in *Hippocrates, Lib. de Artic.* is the same as *δέρμα*, Leather.

DERIVATIO, *παροχέλευσις, ἐποχέλευσις*, a Derivation, in Medicine, is when a Humour, which cannot be conveniently evacuated at the Part affected, is attracted thence, and discharg'd at some more proper Place in its Vicinity ; or is drawn from a noble to a more ignoble Part, where it is less capable of doing Injury. See *PHLEBOTOMIA*.

DERMA, *δέρμα*, from *δέρω*, to excoriate, is the same as *DERIS*, which see.

DERMATODES, *δερματώδης*, from the preceding Word, Leather-like, is an Epithet of the *Dura Mater*.

DERQUET. Vernish. *Rulandus.*

DERSES. An occult Fume or Vapour of the Earth, from whence all ligneous Substances have their Rise and Growth. *Rulandus* and *Johnson* from *Paracelsus, Lib. 3. Philos. ad Atheniens. Text. 4.*

DERTRON, *δέστρον*, in *Lib. 5. Epid.* is taken by *Foessius* for the Omentum or Abdomen ; but *Linden* renders it, according to the Interpretation of *Cornarius*, the small Intestine.

DESCENSIO, DESCENSUS, *κατάβασις*, is properly spoken of the moderate or gentle Motion of the Body or Humour downwards, and is oppos'd to *Anabasis, Ascensio*. The Chymists also have a Way of Distillation, which they call *Distillatio per Descensum*, Distillation by Descent, which is when the Fire is applied to the Top, and all around the Vessel, whose Orifice is at the Bottom ; and consequently the Vapour, being incapable of rising upwards, is precipitated to the Bottom. There is a second kind of Distillation by Descent, called *per Deliquium*, which is a natural liquefying or resolving Salts into a Liquor, by means of Moisture. *Descensio* has also another Meaning among the Chymists ; where it sometimes signifies an Alteration or Descent from a higher to a lower Degree of Goodness and Purity, as of Gold to Quicksilver.

# D E V

DESCENSORIUM. The Furnace in which the *Distillatio per Descensum* is performed.

DESESSIO, from the Verb *desidere*, used by *Celsus, Lib. 4. Cap. 16.* is a Sitting on the Close-stool ; which, in all Fluxes of the Belly, but especially a Lientery, must not, he says, be indulged so often as Nature prompts, but only when Necessity requires it, that, by this very Delay, the Intestines may be reduced to a Custom of bearing their Burden.

DESICCATIO, *ξηρανσις*, from *ξηρός*, dry. A Desiccation, or Drying. Desiccation is also by the Chymists, though improperly, refer'd to Calcination. *Castellus.*

DESICCATIVUM, from *desiccō*, to dry, is an Epithet of an Ointment or Plaster for drying up thin Humours flowing to an Ulcer. *Blancard.*

DESIDIA, *ἀργία*. See *ARGOS*.

DESIPIENTIA, *παρορυσύνη*. The same as *DELIRIUM*, which see.

DESME, *δέσμη*, from *δέω*, to bind, is the same as *Fasciculus*, or *Manipulus*, a Handful. The Word occurs in *Moschion, de Morb. Mul. Cap. 155.*

DESMIDION, *δεσμίδιον*, is a Diminutive of *δεσμός*, (from *δέω*, to bind) a small Handful or Parcel.

DESMOS, *δεσμός*, in *Hippocrates, Lib. de Fracturis*, is an Affection of the Joints after Luxation, in manner of a Tye or Ligature ; whereby they are rendered incapable of Extension or Inflection. It proceeds from an Inflammation drying and hardening the Tendons and Ligaments. The Passage in which the Word occurs, is as follows : *φλεγμονή δὲ ἡ μεγάλη προσγίνεται, ἥ δὲ δεσμός τῇ ἄρθρῳ*, “ but no considerable Inflammation happens, nor Ligature of the Joint ; ” that is, after a Luxation of the Bones of the Knee.

DESPERATIO, *ἀνελπίστια*. Despair. *Paracelsus* treats of Diseases proceeding from Despair, with their Cure, in *Fragment. medicis ad Tom. 1. referendis, Cap. de Desperatione*, and *Vol. 1. Theat. Chym. in Tract. Penoti de Medicam. Chym.*

DESPERATUS, DEPLORATUS, *ἀνελπίστος*, desperate, is an Epithet applied to incurable Diseases, and to Patients labouring under them ; as, for Instance, to a Person under a Dropsy, attended with a Cough. *Hippocrates, Lib. περὶ τεχνῆς*, calls such as are affected with desperate Diseases *κεκρωτημένους ὑπὸ νοσημάτων*, “ subdu'd by Diseases ; ” and forbids attempting their Cure.

DESPUMATIO, Despumation, is the Clarification of a Liquor by elevating its Impurities in a Spume or Froth, and then taking it off.

DESQUAMATIO, Desquamation, generally means the same as *ABRASIO*, which see. It is also a Word to express the Exfoliation of carious Bones.

DESQUAMATORIUM. An Epithet of a Trepan, call'd also *Exfoliativum*, for abrading a Part of the Cranium to what Thickness it shall be thought convenient.

DESTILLATIO, *στέλαξις*, *κατασταλαγμός*, Distillation, is an equivocal Word, sometimes signifying a Defluxion or Catarrh (see *CATARRHUS*) ; and, in Pharmacy and Chymistry, is an artificial Separation of the spirituous, aqueous, oily, or saline Parts of a mix'd Body from the grosser and more terrestrial Parts, by means of Fire. See *ΛΟΥΑ*.

DESTRUCTIO, *φθορά, διαφθορά*, is the same as *CORRUPTIO* ; and is defin'd, in general, an Alteration of any thing from its natural State to one contrary to Nature. A Chymical Destruction, or Corruption, is nothing but a Resolution of the whole naturally mixed Body into its Parts.

DESUDATIO, *εφίδρωσις*. A profuse and inordinate Sweat, succeeded by an Eruption of Pustules call'd *Sudamina*, or *Hidraa*. *Avicenna.*

DESURRECTIO, *ἐξανάστασις*. The same as *DERESSIO*, which see.

DETENTIO. The same as *CATALEPSIS*, or *CATOPHE*, which see.

DETERGENS, *ρύπτων*, deterging. The same as *Abstergens*, absterging. See *ANSTERGENTIA*.

DETERSORIUM. An Apartment at the Baths, where the Sweat was deterg'd, and the Body anointed.

DETERSORIUS, *ρύπτικος*, deterfive. The same as *Absterforius*, absterfive, and a common Epithet of Medicines endu'd with a cleansing Quality, whether inward or outward.

DETONATIO. Detonation. The Noise and Explosion which any Substance makes upon the Application of Fire to it. It is also call'd Fulmination.

DETRACTIO, *καταίρεσις*. See *CATHARESIS*.

DETRITIO, *ράκωσις*. See *RHACOSIS*. *Detritio* is also taken, in a general Sense, for Trituration, in *Scribonius Largus, Numb. 130.*

DETRUSOR Urine. The Name of a Muscle belonging to the Bladder. See *VRICA*.

DEVALGATUS, *βεβλασμένος*. The same as *BLÆSUS*, which see.

DEVEN-



# D I A

**DEVENTRIS**, ἀκρίλιος. See **ACOELIOS**.

**DEUNX**. The Weight of eleven Ounces, or eleven Twelfths of a Pound, or of any entire Quantity.

**DEVOTATUS** is the same as **DEFIXUS**, and signifies a Man render'd impotent by the Power of Witchcraft. *Apuleius, de Medic. Herb. Cap. 7.*

**DEURENS** (*Febris*). The same as **CAUSOS**, which see.

**DEUSTIO**, ἐγκαυσis. See **ENCAUSIS**.

**DEUTERIA**, δευτερία, δευτερις, *Deuterias, δευτερις, Deuterinas, δευτερινος*. All these Terms are used for a secondary low-priz'd Sort of Wine, made of the Husks of Grapes, after Pressing, macerated in Water. It is call'd, by the *Latins*, **LORRA**, which see.

**DEUTERION**, τὸ δευτέρειον, τὰ δεύτερον. The Secundines. See **SECUNDINÆ** and **PARTUS**.

**DEUTEROPATHIA**, δευτεροπάθεια, from δεύτερος, the second, and πάθος, an Affection, Sense, or Feeling, is as much as to say a Fellow-feeling. It imports the same as συμπαθεια, *Consensus*. See **CONSENSUS**.

**DEXAMENE**, δεξαμένη, from δέχομαι, to receive, signifies any Receptacle in general, but, in a restrain'd Sense, the *Labrum* or *Solium*, that is, a sort of deep Basin, in which those who bathed might swim. It was also call'd *Golymbethra*, and *Embasis*.

**DEXIOS**, δεξιός, the Right. It is a received Opinion among the Antients, that the Parts on the Right Side, being that in which the Liver has its Situation, are hotter and more robust than those in the Left; that Males are generally conceived and generated on the Right Side of the Uterus, *Hippoc. 5. Aph. 48.* that the Arteries of the Right Side are larger than those of the Left; and that Diseases are more dangerous on the Right Side, than on the Left. *Cassellus*.

**DEXIS**, δῆξις. A Bite.

**DEXTANS**. The Weight of ten Ounces *Troy*, or ten Twelfths of an Integer.

**DEXTER**. See **DEXIOS**.

**DIA**, δια. A Greek Preposition, signifying of, by, thro', with, and usually governing a Genitive Case, as δια φοινίκων, of, or made of Dates, δια ῥόδων, of Roses, δια χυλῶν, of Liquors or Juices; where, in these and other like Instances, the Preposition δια, by frequent Use, and for the sake of Smoothness or Brevity, came at length, especially when *Latiniz'd*, to be incorporated with its casual Word, and to make with it one compound Term, as *Diarrhodon*, *Diachylum*; and hence *Dia*, when it makes the three first Letters of a Medicinal Term, signifies something compounded principally of the Thing meant by the Word with which it is incorporated.

**DIABACANU**, διαβακάνη. An hepatic Remedy in *Trallian*, *Lib. 8. Cap. 2.* taking its Name from the *Bacanon*, a principal Ingredient. See **BACANON**.

**DIABEBOS**, διαβεβός. In *Hippocrates, Lib. de Art. καὶ διαβεβώτα στυρά* are the Malleoli, or Ankle-bones, not kept asunder, but closed together, speaking of a mechanical Operation for reducing a Gibbosity.

**DIABESASA**, from δια and βεσσα, wild Rue. See the Preparation of this compound Medicine under the Article **ANGINA**.

**DIABETES**, from διαβαίρω, to pass off.

That Discharge of Urine, which the *Greeks* call διαβήτης, is when any Liquor, soon after it is drank, is immoderately, and without undergoing almost any Change, evacuated crude, and under the Appearance of Water.

In this Disorder the Patient is continually afflicted with an insatiable Thirst, incapable of being removed by drinking the most liberal Draughts. The Liquor drank is often discharg'd by Urine, in larger Quantities than it was taken into the Stomach. Thus the whole Body is, by this means, consumed, and, as it were, dissolved; tho', in some Patients, the Loins, the Thighs, the Testes, and especially the Feet, become a little turgid. In this Disorder also a certain Heat is perceiv'd in the Intestines. A *Diabetes* is a Disease of the Chronical Kind, and depends upon the State of the Kidneys. When recent, it sometimes admits of a Cure; but, when inveterate, and of long Standing, it becomes incurable; dissolves, and gradually consumes the Body. Physicians maintain, that this Disorder rarely occurs. *Commius, Obs. Med.*

## OBSERVATION I.

A certain Girl, of eighteen Years of Age, a few Years before her Death, laboured under a *Diabetes*, and was racked with such insatiable Thirst, that, in one Day, she would sometimes drink eight or twelve Gallons, and discharge as much by Urine.

Upon laying open her Body, her Kidneys were not found to be consumed, tho' they were more flaccid than in a natural State they ought to have been; they were also of a cineritious, and not a bright-red Colour. *Petrus Pavius Observat. Anatom. 2.*

# D I A

## OBSERVATION II.

A certain Woman, much subject to nephritic Disorders, and who had once a Stone cut from her Bladder, was at last seized with a Pain in her Left Groin, and became feverish. Upon this she was afflicted with an intolerable Pain in her lower Belly, Restlessness, continual Vomitings, a Pain at her Breast, and various other Species of Pains. In her Left Hypochondrium a large hard Tumor appeared, which induced some to assert, that the Spleen, and others, that the Kidney, was swell'd. She labour'd under a hectic Fever, gentle Convulsions, frequent Faintings, and a Species of Diabetes; for her Urine, which was thin, and sometimes bloody, was discharg'd involuntarily. These Symptoms at last put an End to her Life.

Upon laying open her Body, a small Stone was found in her Left Kidney, which had on all Sides grown out so far, as in Bulk to equal that of an Ox. There was a small Quantity of Sanies also found in it. But the Right Kidney was wasted so much, and become so little, that it was scarcely to be found. *Ballonius, Ephem. 8. & Epid. Lib. 2.*

## OBSERVATION III.

A certain Gentleman of Distinction discharged large Quantities of Urine like Water, and was afflicted with an insatiable Thirst, which could not be removed by the most copious Draughts; but, at last, dying of a burning Fever, his Body was laid open; upon which his Lungs were found black, and highly tumid, and two large Stones in each Kidney.

## OBSERVATION IV.

Tho' the Cause of a *Diabetes* is ascribed to a Disorder of the Kidneys, yet, upon opening the Bodies of some, who have dy'd of that Disease, their Bladders have been found plainly contracted, and Gangrenes and sphacelous Tumors have been discovered in their Cavities. This Circumstance ought to be adverted to, lest any one should be deceived. *Ballonius, Epid. Lib. 2.*

Rabbi *Moses* affirms, the *Diabetes* is very seldom seen in the Western Parts of the World, but more frequently in the hot and Eastern Countries; insomuch that in *Egypt*, in ten Years Practice, he saw more than twenty Patients of this Kind: But we see a great Number, almost every Year, in our Western World.

The Account *Aretæus* gives of the *Diabetes* is as follows:

The *Diabetes* is a strange, and not very common Distemper, consisting in a Colliquation of the Flesh and Members into Urine, and proceeding, like the Dropsy, from a cold and humid Cause. The Discharge is by the usual Passages, the Kidneys and the Bladder; and the Flux of Urine is perpetual, as from an open Sluice. The Disease is of a chronical Nature, and a long time contracting; but, when arrived at its Height, the Patient continues but a short time; for the Colliquation is violent, and Death approaches with Speed, and soon puts an End to a loathsome and painful Life. The Symptoms of this Disorder are, an insatiable Thirst, and immoderate Drinking, which, however, bears no Proportion to the excessive Quantity of Urine; and it is as impossible to restrain the Sick from drinking, as from making of Water; for, if they refrain from all potable Liquors for the least Space of Time, their Mouth is parched for want of Moisture, their Body dry'd up, and their Viscera seem to burn within them; they are molested with great Restlessness and Anxiety, and die in a short time, exhausted with Heat and Thirst, as with a Fire. No Reason can induce, nor Shame prevail upon, them to retain their Water; for both submit to the Sense of Pain: And, upon the least Suppression, they are afflicted with a Tumor of the Loins, Testes, and Hips; which subsides after a free and plentiful Discharge of the Urine, the redundant Humour having its Course diverted to the Bladder.

When the Disease is perfected, its Characters are evident; but, when it is in its Growth, the Symptoms are, a Dryness of the Mouth, white frothy Spittle, like that of a thirsty Person, but, as yet, without Thirst, together with a Sense of Weight on the Hypochondria. In the Progress of the Disorder the Patient is affected with a Sense of Heat or Coldness, which reaches from the Belly to the Bladder; and his Discharges by Urine are a little more in Quantity than usual; and he grows thirsty, but not as yet to any vehement Degree.

As the Disease increases, it is attended with a small, but biting, Sensation of Heat in the Viscera; the Abdomen becomes wrinkled, the Veins appear prominent, and the whole Body is emaciated; the Flux of Urine, and the Thirst, are more and more augmented; and whenever the Disorder, by Consent of Parts, affects the Extremity of the Penis, the Patient immediately makes Water. And hence the Disease seems to me to be call'd *Diabetes*, that is to say, a *Pipe*, because, in Persons affected with it, nothing liquid remains in their Body, but all runs thro' it, as if it ran thro' a Pipe. The Patient struggles with the Disease for some time, but not long; for he discharges his



his Urine with Pain, and the Colliquation is dreadful beyond measure, since nothing considerable of what he drinks is distributed over the Body, and the Flesh is continually dissolv'd, and passes away in great Quantities in the Urine.

The Causes of this Disorder may be some occult and malignant Reliques of an acute Distemper remaining after the Crisis. It is not improbable also, that something of a deleterious Quality, particularly injurious to the Kidneys and Bladder, may occasion such an Affection; for it may proceed from the Bite of the venomous Serpent the *Dipsas*, which kindles an unquenchable Thirst. The Patient drinks immeasurably, not to the Satisfaction of his Thirst, but the Repletion of his Belly. If he be in Pain from the Distention of his Belly, and abstains a short time from Liquor, his ardent Thirst compels him to fall afresh to drinking; and thus he labours under a Vicissitude of Evils, and Thirst and Drinking help one another to hasten his Destruction. Some neither evacuate by Urine, nor have any Way to discharge what they drink, but by Perspiration: Whence it comes to pass, that, thro' a Redundance of Liquor, still augmented by an insatiable Drinking, the Belly becomes more and more distended, and at last suddenly bursts. *Aræteus, de Caus. et Sig. Morb. chron. Lib. 2. Cap. 2.*

As nothing has a more direct and immediate Tendency both to discover and illustrate Truth, than a joint View of what the greatest Authors have wrote upon any Subject; and as even Errors themselves sometimes luckily point out the Way to Truth; we shall therefore enumerate the Sentiments of some of the most celebrated modern Authors, with respect to the Symptoms, the Cause, and the Cure, of a Diabetes. The learned and ingenious Dr. *Lifter* informs us, that this Disorder does not seize the Patient suddenly, but, from an imperceptible Beginning, gradually acquires fresh Degrees of Strength, till at last it terminates in a formidable Disease. Upon the first Approach of this Distemper, the Patient's Mouth becomes dry and parched, his Saliva white and frothy, and his Urine more in Quantity than it was in a sound and healthy State. He is seized with a Thirst, which at first is pretty moderate, but gradually calls for larger Supplies, in proportion as the Disease advances: He begins to perceive a preternatural Heat, and gently-biting Pain, in his Bowels; his Body becomes ghastly and meagre, and his Mind restless and inconstant. When the Vessels are much relaxed, his Urine is discharg'd continually, and without Intermission, a Circumstance by which his Solids are surprisngly wasted, and, as it were, melted away. During this deplorable State of Things, his Thirst becomes insatiable; and, which is surprisng, the Quantity of the Urine he discharges, surpasses that of the Liquor he drinks. If he retains his Urine for a very inconsiderable time, he is seized with a Swelling of the Loins, the Testes, and the Iliac; and the Discharge of it is attended with Pain. These Symptoms are speedily succeeded by Death. The Urine of a Patient in this Condition is of a soft and mild Taste; but Dr. *Lifter* affirms, that he never met with any of it sweet; tho', at the same time, he owns the Probability of its becoming gradually sweetish, since, in the Beginning of the Disorder, it is mixed with the aqueous, and afterwards with the chylous, Parts of the Serum. This Opinion, he thinks, is confirm'd by the Sweetness of the Matter expectorated by phthisical Patients a little before they die.

The learned and judicious *Willis* informs us, that this Distemper was little known among the Antients, but is become more common among the Moderns; that it is accompanied with a continual Thirst, and a Species of slow hectic Fever; and that he himself knew a Man, who, by using *Rhenish* Wine for twenty Days as his common Drink, contracted an incurable Diabetes.

According to *Ettmüller*, this Disease is distinguished into three Kinds, a *true*, and a *spurious Diabetes*, and that Species which is call'd a *Cæliaca* by Urine.

The true and legitimate Diabetes bears a certain Resemblance to a Cæliac Passion and Lientery; for, as in these the Aliments are evacuated by Stool crude and uncooked, so, in this, the Liquor drank is discharged by Urine, without undergoing any considerable Change with respect to Colour, Taste, and Smell, as may be observed upon the Patient's drinking red Wine: But this Species of Diabetes rarely occurs.

In a spurious Diabetes, the Urine is discharged in preternaturally large Quantities, and the Patient is afflicted with an insatiable Thirst, Loss of Strength, Leanness, a burning Heat about the Region of the Loins, a slow continual Fever, and even the Symptoms of a confirm'd Hætic. In this Species of the Disorder a pinguious Matter is sometimes discharged with the Urine; but these Symptoms prognosticate the speedy Death of the Patient.

The third and last Species of a Diabetes, commonly call'd a *Cæliaca* by Urine, is when the Chyle is discharged along with, or instead of, the Urine.

According to this Author, a Diabetes is always dangerous, and often incurable, especially if contracted by immoderate Labour, excessive Venery, and chronical Fevers, as also by a

long Habit of drinking spirituous Liquors. The Urine of those afflicted with a Diabetes is generally sweet.

According to the incomparable *Sydenham*, the Juices, convey'd into the Blood in a Diabetes are discharg'd by Urine, crude and uncooked; by which means the Strength of the Patient is gradually impair'd, his Body wasted, and its Substance, as it were, colliquated and carry'd off by the urinary Passages. The Patient, under this Disorder, is rack'd with Thirst, afflicted with a Heat of the Bowels, seized with a Swelling about the Loins and Hips, and often expectorates a frothy Matter.

Various Authors inform us, that this Distemper is seldom mention'd among ancient Writers, and that it was little known among the *Greeks*, since *Galen* himself, in the third Chapter of his sixth Book, *de Locis Affectis*, confesses that he himself had only seen it twice.

#### The Method of Cure.

According to *Aræteus*, the Diabetes, if Regard be had to the Cause, as well as Form and Manner, of the Distemper, is a kind of Dropsy; and differs from it only in the Place by which the Liquid is discharged. For, in the *Ascites*, the Peritonæum is the Receptacle for the Waters, which, finding no Vent, are there collected and abound; whereas in the Diabetes, the Patient is affected with the same Colliquation and Flux of the Liquids; but then they take their Course to the Kidneys and Bladder, by which they are evacuated: Now, this is the way by which hydropical Persons find most Relief, when the Disease takes a favourable Turn; though the easing them from the present be not sufficient for removing the Cause: But in the Diabetes the Thirst is the greater, because the continual Discharge of the Liquids dries the Body.

The Remedies for putting a Stop to the Colliquation are the same as those which are proper for Dropsies; but the Thirst is to be the principal Object of our Care; for this is the most tormenting Symptom belonging to this Disorder; and, if the Patient attempts to appease it by Drinking, he immediately provokes a Flux of Urine, which carries off with it much of the colliquated Substance of the Body. Proper Medicines then are such as quench Thirst, which no drinking, how plentiful soever, can assuage. The Stomach, therefore, whence proceed the Incentives to Thirst, is by all means to be relieved; first, by purging with Hiera, and then by Applications of Epithems of Spikenard, Mastic, Dates, and raw Quinces; the Juice of which, with Spikenard, and Oil of Roses, makes an excellent Embrocation for this Purpose; and of this Pulp, together with Mastic and Dates, may be made a Cataplasm, for the same Use; and with these may conveniently be mix'd Wax and Ointment of Spikenard, or the Juice of Acacia and Hypocistis, as well for Embrocations as Cataplasms.

For Drink, let the Patient use Water boil'd with autumnal Fruits [*σπάρσι*]; and let his Food be Milk, mix'd with frumentaceous Aliments, as Amylum, Alica, and forbile Liquors. His Wine must be astringent, for restoring the Tone of the Stomach; and but little diluted, for the better Evaporation and Dissipation of the other Humours. For salt Things excite Thirst, but Wine that is both astringent and cooling, changes the Body to a good Temperament; and sweet Wine, [*δύρε γλυκύς*, Wine made of Grapes left to dry in the Sun, Lat. *Passum*, which see] moreover, restores Strength, by generating Blood. Various are the compound Medicines for these Purposes, such as Theriaca, Mithridate, and what is prepared of autumnal Fruits, with other Medicines proper for a Dropsy, and a Regimen of Diet, and Way of Living, in all Things answerable to what is prescribed for the Cure of that Distemper. *Aræteus de Curat. Morb. Chron. Lib. 2. Cap. 2.*

According to *Lifter*, nothing more effectually contributes to the Cure of this Disorder, than all Preparations of Almonds, and a Milk-diet; and he himself gives us an Instance of one cured of it by drinking as much Wine, boil'd with Ginger, as his Strength and Condition would admit of, allowing him, at proper Intervals, Draughts of Milk and Water, to allay his Thirst.

According to *Willis*, few or none at all have been observed to be cured of a Diabetes by Astringents; and this Practitioner, as he himself informs us, often prescrib'd, with Success, the Tincture of Antimony, and a Solution of Quick-lime in Water, together with Sassafras, Anise-seeds, Raisins, and Liquorice. He, in Conjunction with some other Physicians, prescribed in the following manner for a certain Person of Distinction:

Take of the Tops of Cypress-tree, eight Handfuls; of the Whites of Eggs, two Pounds; of Cinnamon, half an Ounce; and of recent Milk, eight Pints: Mix all together, and subject them to Distillation. Six Ounces are to be taken for a Dose, three times a Day.

Take of Gum Arabic, and Gum Tragacanth, each six Drams; and of the Saccharum Penidum, one Ounce.  
6 G Reduce



Reduce them into a Powder, of which one Dram, or one Dram and an half, are to be taken twice a Day in the above-mentioned distil'd Water, exhibiting a paregoric Draught every Night.

This Patient's Diet consisted almost entirely of Milk; and, by the Use of these, he recovered so fast, that in a Month's time he was restored to a perfect State of Health.

The same Author gives us the History of a Woman, of about fifty Years of Age, and of a full Habit of Body, who so long labour'd under a Diabetes, and a Salivation, succeeding each other alternately, that her Strength was highly exhausted: For this Patient he prescribed an Infusion of Rhubarb, in *Canary Wine*, every Day. A few Days after, he order'd her to drink *Fuller's Decoction Catechu Compositum* every Night; and, for her common Drink, *Florence Wine* diluted with *Bristol Waters*; by which means both Disorders were effectually removed in two or three Weeks, and the Patient enjoy'd perfect Health for several Years after.

According to *Ettmuller*, the principal Intention of Cure, in a Diabetes of every Kind, is to diminish the Acrimony of the Blood; and, in most Circumstances, the Cure both of a spurious Diabetes, and that call'd a *Cœliaca* by Urine, is to be carried on in the same manner with that of hectic Fevers. He therefore orders the Cure to be begun with an Emetic, and then recommends the *Antihæticum Poterii*, Blood-stone, Sugar of Lead, *Crocus Martis Aluminata*, the *Trochisci de Carabe*, the *Terra Sigillata*, and Opiates at Night; but especially Quick-lime-water, chalybeated Milk, and Emulsions.

In a true and legitimate Diabetes, he recommends the Use of Astringents and Chalybeates; but, in particular, of a Decoction of Orange-peel.

The Cure of a Diabetes, according to *Sydenham*, is the same with that of the Fluor Albus, omitting the Circumstances of Bleeding and Purging; since, notwithstanding the apparent Differences between these Diseases, the curative Indications are the same in both.

*Harris* ingeniously, and, perhaps, justly enough, imagined, that a Diarrhœa was a kind of Diabetes of the Belly; and a Diabetes, a Diarrhœa of the Kidnies: For which Reason he, with Success, prescrib'd in the following manner for a Patient labouring under a Diabetes:

Take of the best Rhubarb, half an Ounce; of white and yellow Sanders, each one Dram; of the smaller Cardamom-seeds, half a Dram: Mix all together, infuse them in a Pint of *Canary*, plac'd over a gentle Heat, in a close Vessel.

This Patient took six Spoonfuls of this Wine, when strain'd, at Six in the Morning, and six more at Ten; by which means the Diabetes, and all its concomitant Symptoms, were remov'd before Ten o'Clock at Night. But this celebrated Author has only one Instance of a Diabetes cured in this Manner.

Besides these Medicines and Forms already mentioned, the *Decoction Catechu Compositum*, the *Decoction Incurassans*, *Isinglass*, *Jellies of Hartshorn*, *Rice*, *Tincture of Coral*, and the *Trochisci Gordonii*, are of singular Service. But, in the modern Practice, nothing is look'd upon as a Remedy so effectual for the Cure of a Diabetes, as the hot Well-waters at *Bristol*. The following Decoction may be used with singular Success:

Take of *Peruvian Bark*, reduc'd to a gross Powder, one Ounce; and of the Tincture of *Roses*, one Pound and an half: Boil it to one Pint, over a slow Fire; then strain off the Liquor, and add half a Pint of White-wine, and two Ounces of the Syrup of Quinces: Mix all together, for a Decoction, three Ounces of which are to be taken two or three times a Day, at proper Intervals.

With respect to this Distemper, *Dr. Wynter* starts a Question, Whether *Bristol Water* be specific in a Diabetes? A specific Remedy, says he, for each Disease, would prove, in Physic, what finding the Longitude must, in Navigation: We should go directly to the Cure, without the Circle of the alterative Course: But, at present, there is as little Probability of discovering the one, as the other. We know but one Specific, and but one Disease cur'd by it, unless I can prove this to be such in the Diabetes.

The Diabetes then is defin'd to be a too quick and large Excretion of crude, unalter'd, and sweet-tasting Water, exceeding the Proportion of Fluids taken into the Body, accompanied with intolerable Thirst: And a specific Medicine is that which cures a Disease, without promoting any sensible Evacuation.

Suppose then a Person, labouring under a Diabetes, void a given Quantity of such Urine, for Instance, four or five Quarts in twenty-four Hours; let him drink as many of this Water, and he shall excrete less daily. From whence it is manifest, that it proves no Evacuant. Another Argument to

prove its specific Quality is, that it may be used in as large Quantities as the Stomach will bear; and this is a very grateful Circumstance to Persons labouring under an insatiable Thirst. In all other Disorders, where it acts by its contempering, alterative, and heating Qualities, it also proves specific. A third is, that we see, by daily Experiment, its Effect in a Diabetes more quick and sudden, than in any other Distemper, the Patient being certain of a Cure in a very short time. *Wynter's Cyclus Metasyneriticus.*

#### A CONSUMPTION from a DIABETES.

A Diabetes is commonly call'd a Dropsy of the Chamber-pot, and is a continual Flux of the nutritious Juice running down through the Kidnies; which, for the most part, happens to those that are very thoughtful, and to such as are Drinkers of *French Wines*, and diuretic Liquors: Whereupon the Urine (by reason of the great Quantity of new Chyle, which flows to it, and mixes itself with it) being deprived of its Saltness, become sweet, even like Honey. By the continual Efflux of the Chyle the Blood is impoverish'd; and thereupon the Strength of the Patient grows extremely languid. A preternatural Heat is kindled in the solid Parts, by which the Nerves are weaken'd; and, upon that, Convulsions, a Giddiness, and other Affections of the Nerves, ensue; and, at length, the muscular Parts, being deprived of their nutritious Juices, fall into an Atrophy, or Consumption. The Way of curing this Consumption is by a long Use of a Milk-diet, Conserve of red *Roses*, *Bole Armoniac*, *Gum Arabic*, and *Gum Tragacanth*; by drinking the *Bath* or *Islington Waters*, or any other mineral Water that is chalybeate, for a long time. But the Patient must abstain from Wine, especially *French Wine*: He must not bleed, nor use any purging Medicines, except Rhubarb, Myrobalans, and other such-like gentle Things, which have also some styptic and binding Particles; of the Virtue of which, in curing this Distemper, I shall presently give a very remarkable Case.

#### CASE I.

*Mr. Petit's* Son, upon a Diabetes, which they had a long time neglected the Cure of, was not only frequently troubled with Fits of the Falling-sickness, and a Swimming in his Head, but also, in the Progress of the Distemper, became very consumptive. But with the Use of *Tunbridge Waters*, a Milk-diet, and astringent Eleâuaries, he was perfectly recover'd, and is now, after ten Years, in perfect Health.

#### CASE II.

*Mr. Petit* himself, the Father of the Patient I just now mentioned, being about seventy Years of Age, who was brought by a Diabetes into a high hectic Fever, and to the utmost Degree of a Marasmus, and kept his Bed for three Weeks, got well of his Diabetes and Fever, and at length his Consumption too, by the Use of a Milk-diet, which he very strictly observed, and of astringent Julaps and Eleâuaries; and is now, as far as I know, after five Years, still living.

#### CASE III.

*Mr. Wheeler*, living in *Prince's-street*, though he has now three Girls living, and well, yet he lost all his Sons, who were taken off, in their first Infancy, (that is, as soon as they began to breed their Teeth) with a Consumption from a Diabetes. As for the Name of the Distemper, that he was ignorant of; but when he observ'd, that he lost all his Sons in the same manner, and that they were extremely emaciated with a continual and unquenchable Thirst, and a strange Flooding of Urine, he at length ask'd my Advice for his fourth, who at that time was breeding of his Teeth. And he began, just like the three former, that were dead, to be very thirsty, and to make Water at the same immoderate Rate that they had done; whereby his Flesh became very lank, and a hectic Heat began to arise. So being confirm'd in my Opinion, by so demonstrative an Argument as the Sweetness of his Urine, being like Honey, I pronounced it a Consumption from a Diabetes, caused by the Breeding of his Teeth; which could not possibly admit of a perfect Cure, till the Child had bred all his Teeth. Within the Space of a Month or two, the poor Infant seem'd to have a *Hippoeratical Face*, and to be reduced to that Degree of a Consumption, as to be arrived at the last Scene of his Tragedy; for he labour'd under a Colliquation, as well by a Looseness, as a Diabetes, though he had no Cough, nor any other Affection of his Lungs. However, for the present Relief of the Symptoms, I order'd a Milk-diet to be strictly observed, and an astringent Eleâuary; and gave Orders, that for his Thirst, he should drink nothing but Milk, mix'd with *Islington Waters*, all the Summer: By which means his Thirst, and the Flux of his Urine, seem'd to be somewhat abated, and his Flesh to be recover'd. But the Distemper returning by uncertain Intervals, with a remarkable Colliquation, and Expence of the Humours, as well by Stool, as by the urinary Parts, that is, as often as he bred any



new Teeth, according to the Prognostics which I at first made; at length I order'd him six, seven, or eight Grains of Rhubarb to be taken every Morning, and a little Diascordium at Night, when he went to sleep. To the constant Use of which Remedies I left the Child, and he persisted in the Use of them for two Years at least, that was, till all his Teeth were cut; by which means he continually gather'd Strength and Flesh, and grew better every Day, though he was in some measure troubled with a Thirst, and too great a Flux of Urine, till the time that he had got all his Teeth. But now, being four Years old, he enjoys his perfect Health, and is a lusty Boy, as if he had never been troubled with any Distemper. *Morton's Phthisiologia.*

DIABIN, *διὰ βιν*, a barbarous and corrupt Word in *Myrepsus*, *Antidot.* 37. and *Passil.* 48. which *Fuchsius*, by the Help of *Aetnarius*, amends, by reading *διὰ ἰων*, "of Violets." The Latin Copies of *Myrepsus*, he observes, render it *Diauf*.

DIABOLUS *Metallorum* is a Title bestow'd by the Chymists on *Jupiter*, or Tin; because, when incorporated with other Metals, it renders them incapable of Reduction, or at least very difficult to undergo that Operation. *Castellus.*

DIABOLI INTESTINA. A Name for the *Cuscuta Dodder*.

DIABOTANUM, *διὰ βότανων*, from *βότανον*, an Herb, is a Plaister prepared of Herbs, describ'd by *Galen*, *de C. M. P. G.* *Lib.* 6. *Cap.* 2.

DIABROSIS, *διὰ βρωσις*. The same as ANABROSIS, which see.

DIACADMIAS, *διὰ καδμίας*. The Name of a Plaister, whose Basis is *Cadmia*, in *Scribonius Largus*. *Numb.* 242. One like this is describ'd by *Galen*, *de C. M. P. G.* *Lib.* 2. *Cap.* 14. which was used by *Lucius*, and reckon'd among the Epulotics.

DIACALAMINTHES, *διὰ καλαμίνθους*. The Name of an Antidote, whose Basis is Calamint, in *Myrepsus*, *Antid.* 105.

DIACARCINON, *διὰ καρκινων*, from *καρκινος*, *καρκινος*, a Crab, or Cray-fish. The Name of an Antidote prepar'd of those Fish against the Bite of a mad Dog; which, as *Galen* says, *Lib.* 11. *de Simp. Facult. T. de Cancris uftis*, was used by *Æschrius*, with very good Success.

DIACARYON, *διὰ καρύων*, from *καρύον*, a Walnut, Rob of Walnuts. *Galen*, *de C. M. S. L.* *Lib.* 6. *Cap.* 2. See the Preparation of the Diacaryon for the Quinsy, under the Article ANGINA.

DACASSIA. See CASSIA.

DIACASTORIUM, *διὰ καστορίων*, from *καστορίων*, Castor, is the Name of two Antidotes, in which Castor is a principal Ingredient. *Nicol. Myreps. Sect.* 6. 27. and 102.

DIACATHOLICON, otherwise call'd CATHOLICON, from *διὰ*, of, and *καθολικόν*, universal, the universal Purge.

Take of the Pulps of Cassia and Tamarinds, and of Senaleaves, of each two Ounces; of Polypody-root, of Violet-flowers, and of Rhubarb, of each one Ounce; of Aniseeds, white Sugar, and Liquorice, of each two Drams. Powder those Ingredients together that require it: And then take of fresh Polypody-root bruised, three Ounces; of sweet Fennel-seed, six Drams; and boil them in two Quarts of Spring-water, to the Consumption of a third Part: Strain out the Liquor, and, with two Pound of the finest Sugar, boil it up to the Consistence of a Syrup; then by degrees pour it upon the Pulps, as they stand over the Fire; and afterwards stir in the Powders, so as to make the Whole into an Elecluary.

This is originally a Prescription of *Nicolaus*, and the College receiv'd it into their first Dispensatory, under the Title of *Diacatholicon*; but the preceding to this varied considerably from that, both in the Materials, and Order of Preparation; though here, the cold Seeds, and some other Ingredients, of no great Consequence to the main Intention of the Whole, are quite rejected, although, at best, it is but an indifferent Composition; and, notwithstanding its ostentatious Title, hardly ever preferib'd or made.

DIACELTATESSON. A Term in *Paracelsus*, relating to the Cure of Fevers, *Lib.* 2. *de Vita longa*, *Cap.* 5. He seems to mean by it a Vomit excited by Mercury. *Rulandus* and *Johnson* read *Diateffadellon*, that is, *precipitate Mercury*. Others will have the *Diaceltateffon* to be crude Quicksilver dissolved by the Liquor Alcahest.

DIACENES, *διὰ κενός*, *διὰ κενός*, from *κενός*, empty, vain, in *Hippocrates*, signify vain, fruitless. Thus *διὰ κενός ἐξαυασμός*, *Lib.* 7. *Epid.* import the Patient's often endeavouring to go to Stool without Effect; and *διακενός θηράων*, is spoken of a Person in a Phrensy, who vainly employs his Hands in searching about, and catching at he knows not what.

DIACENOS, *διὰ κενός*, from *κενός*, empty, void, is an Epithet of porous Bodies, such as a Sponge, and a Pumice-stone, *Gal.* *Lib.* 4. *de Diff. Puls.* *Cap.* 6. *Castellus.*

DIAGENTEFON. The Name of a Collyrium in *Aetius*, *Tetr.* 2. *Serm.* 4. *Cap.* 110.

DIACERATON, *διὰ κέρατος*, the Name of a Collyrium in *Celsus*, *Lib.* 6. *Cap.* 6. so call'd, he says, from *κέρως*, a Horn, because burnt Hartshorn is a principal Ingredient in it.

DIACHALASIS, *διαχάλασις*, from *διαχάλαω*, to be relaxed or opened, in *Hippocrates*, *Lib.* *de Vulneribus Capitis*, is a Solution of Continuity in the Sutures of the Cranium; that is, when the Bones recede from their mutual Indentations, an Accident which frequently happens in Wounds of the Head.

DIACHEIRISMOS, *διαχειρισμός*, from *χεῖρ*, a Hand, is any manual Operation. *διαχειρισμοὶ φαρμάκων*, *Lib.* 2. *Epidem.* import Preparations, Administrations, and Dispensations, of Medicines.

DIACHELIDONIUM, *διαχελιδόνιον*, from *χελιδών*, a Swallow, is a Preparation of Swallows; which see under ANGINA.

DIACHOREMA, DIACHORESIS, *διαχόρημα*, *διαχόρησις*, in *Hippocrates*, signify, according to *Galen*, *Com. ad Aph.* 18. *Lib.* 2. all manner of Excretions or Evacuations from the Body, but more properly and frequently Excretions of the Belly by Stool; for *Hypochoresis*, (*ὑποχόρησις*) and *Diachoresis*, he says, differ in this; that the former signifies only Discharges by Stool, but the other may be understood of Evacuations of all Sorts. Again, *Com. ad Aph.* 68, 69. *Lib.* 7. he tells us, that *Hippocrates* calls the Stools indifferently *Hypochoremata*, and *Diachoremata*, and sometimes applies them to Excretions by Urine.

DIACHORISIS, *διαχώρισις*, from *χωρῶ*, apart, signifies Separation. The Word occurs in *Moschion*, *de Morb.* *Cap.* 129.

DIACHRISTA, *διαχρίστα*, from *χρίω*, to anoint, in *P. Aegineta*, *Lib.* 1. *Cap.* 46. are Medicines applied to the Fauces, Uvula, Palate, and Tongue, for the Absterion of Phlegm.

DIACHRYSU, *διαχρυσόν*, from *χρυσός*, Gold, is the Name of a Plaister for Fractures in *Gal.* *superio Libro alt. de Dynamidiis*, § *ad Ossia fracta*.

DIACHYLON, *διὰ χυλῶν*, from *χυλός*, a Juice, is an emollient, digestive Plaister, composed of Juices. *Gal.* *Lib.* 7. *de C. M. P. G.* *Cap.* 9.

There are several Plaisters describ'd by Dispensatory-writers, under the Name of *Diachylon*. The College order the *Diachylon Simplex*, the *Diachylon Magnum*, the *Diachylon Magnum cum Gummi*, and the *Diachylon Compositum*, otherwise call'd *Emplastrum à Mucilaginis*.

#### DIACHYLON SIMPLEX: Simple Diachylon.

Take of Mucilage of Fenugreek, and Linseeds, and of Marshmallow-root, of each one Pound; of old Oil, that is fine, three Pound; of Litharge of Gold, one Pound and a half. To make the aforesaid Mucilage, take of Fenugreek, and Linseed, and of Marshmallow-root, of each three Ounces; of common Water, three Quarts: Let the Litharge be finely powder'd, and mix'd with the Oil; then boil it over a gentle Fire, stirring it all the while with a Spatula, until it grows as thick as the Consistence of Honey. Take it from the Fire, and let it leisurely cool, and then mix it with the Mucilage, and gently boil it again to the Consumption of all the aqueous Humidity, so as to make it into a Plaister. *S. A.*

This is originally preferib'd by *Mesue*, and is not only the most common Plaister of the Shops, as it is much us'd alone; but also, as it is the Basis of many others. What is given in the *Augustan* Dispensatory under the Title of *Diachylon simplex, sive album*, is exactly the same as this; and the *Diachylon parvum*, ascrib'd to the same Author, in the same Collection, differs only in adding Henbane and Fleawort-seeds to the Mucilage. But the Simplicity of this Composition is such, as to have admitted of very little Variation in any Hands it hath pass'd thro': However, we have some Dealers in Medicine amongst us, who have had Disingenuity and Dishonesty enough to debase it, by the Use of Hog's Lard instead of Oil, and adding Cerusa to it, to make it heavier; with an Omission also of the Mucilage, only for the sake of a greater Profit in its Sale.

#### DIACHYLON MAGNUM: The greater Diachylon.

Take of the Mucilages of Raisins, Figs, Marshmallow-roots, Fenugreek, and Linseed, Bird-lime, of the Juices of Orrice and Squills, of Celsus, or Sheeps-foot Oil, of each one Ounce and a half; of the Oils of Orrice, Chamomile, and Dill, of each eight Ounces; of Litharge of Gold, finely powder'd, one Pound; of Turpentine, three Ounces; of Resin of the Pine-tree, and yellow Wax,



of each two Ounces. Let the Oil and Litharge be well stirred together, and then boiled over a gentle Fire, all the while stirring it, till they incorporate into a Body: then removing it off the Fire, till it is cold, add the Mucilages, and boil again to the Consumption of all the superfluous Humidity. Afterwards put in the Bird-lime, the CEsypus, with the Juices of Orrice and Squills, and boil again to the Consumption of these Juices; and, while the Mixture is yet hot, melt in the Wax and Refin: After it is taken off the Fire, mix in the Turpentine by brisk stirring; so that the Whole may obtain a suitable Consistence for an Emplaster.

This is also ascribed to *Mesue*, and hath kept its Place in almost all the Official Dispensatories, as well as those of our College, and without much Alteration. Indeed *Zwelfer* takes the Liberty to say, that this, and all Compositions of like kind, deserve rather to be quite expung'd than mended; altho', in the same Place, he is at a good deal of Pains to direct the particular Manner of its Composition: That is, however, so fully done here, as not to want any of his Help. The CEsypus was frequently directed in the antient Pharmacy, particularly by *Matthiolus* and *Dioscorides*; from whom *Schröder* teaches us, that it was made by boiling that Wool of a Sheep, which grows chiefly upon the Neck and Flanks, in Water, till the Oil was got out of it, and could be separated from the Water: But the Joint-oil of the Feet, which is here substituted to save that Trouble, is every whit as good for the same Intention; it partaking as much of that soft mucilaginous Nature, as the other was supposed to do.

*Diachylon magnum cum Gummi:*

*The great DIACHYLON with Gums.*

Take of strained Galbanum, three Ounces; of Bdellium, Sagapenum, and Ammoniacum, of each two Ounces. Let them be added to the preceding *great Diachylon*, after Solution in Wine, straining and boiling up to the Consistence of Honey; and, by this means, it becomes a *Diachylon* with Gums.

This Addition to the former was, originally, the Contrivance of *Renodæus*, except the Galbanum; but the *Pharmacopœia Regia* adds the Gums to the *Diachylon simplex*, which is a much less troublesome way, leaving out the Bdellium, and putting in both Galbanum and Opopanax. The *Augustan* Dispensatory gives a Prescription from another Author; but that is so extremely perplex'd, as to have been followed by none since.

*Diachylon compositum, sive Emplastrum e Mucilaginis:*

*Compound DIACHYLON, or the Mucilage-plaister.*

Take of the Mucilage of the middle Bark of Elm, of Marshmallow-root, Fenugreek, and Linseed, of each four Ounces and an half; of the Oils of Chamomile, Lilies, and Dill, of each one Ounce and an half; of Ammoniacum, Galbanum, Sagapenum, and Opopanax, of each half an Ounce; of yellow Wax, twenty Ounces; of Turpentine, two Ounces; of Saffron, two Drams. Let the Mucilages, extracted with Water, be boiled over a gentle Heat with the Oils, to a Consumption of their aqueous Humidities; and the Wax, cut into small Pieces, be melted in them, and stirred in with a Spatula: When they are taken from the Fire, and while hot, add, by degrees, the Gums dissolv'd in Turpentine, and stir them well about: Lastly, put in the Saffron, finely powdered, so that the Whole may be made into a Mass, of a Consistence fit for a Plaister.

This a Composition of *Mesue*, and hath been in all the Official Dispensatories, with little or no Alteration. It is much in Esteem now amongst our Surgeons, who use it principally as a Suppurative.

DIACHYSIS, *διαχυσίς*, from *χύω*, to fuse, or melt, is Liquefaction, or Fusion. *Diachytica*, (*διαχυτικά*) in *Dioscorides*, are Medicines of a discutient and dissolving Quality, such as he ascribes to Anise and Turpentine.

DIACHYTOS, HYPOCHYTOS, *διαχυτος, υπόχυτος*, are Epithets of Wine, prepared of Grapes dry'd seven Days in the Sun, in an inclosed Place, on Hurdles raised seven Feet from the Ground; by which means they are defended from the Dews and Moisture of the Night, and fit to be pressed the eighth Day. By this Method, as *Pliny* relates, *Lib. 14. Cap. 9.* they make a Wine of an excellent Taste and Flavour.

DIACINEMA, *διακίνημα*, from *διακίνηω*, to move or agitate in a slight Manner, (so *Galen*, *Com. 4. in Lib. de Art.* explains the Verb) is a slight Dislocation. Thus *διακινήματα* *συνεστάτων*, *Lib. de Pract.* are small and inconsiderable Dis-

junctions or Removals of the Bones from their just Situation, as *διασθιμάδα* are perfect Luxations, when the Bone is entirely remov'd out of its Place. The *Diacinematata*, in the Language of *Celsus*, *Lib. 8. Cap. 14.* are *quæ paulum excesserunt*; and the *Holisthemata*, *quæ toto loco mota sunt*.

DIACINAMOMUM, *διακινάμιον*, is the Name of an Antidote in *Myrepsus*, *Antid. 11.*

DIACISSU, *διακίσση*. An Acopon in *Marcellus Empiricus*, *Cap. 36.* near the End; which takes its Name from *κίσση*, Ivy.

DIACLYSMA, *διακλυσμα*, from *κλύω*, to wash out, or rinse, signifies in particular a Collution of the Mouth by Liquors held therein for a while, and then discharged, comprehending under it *Gargarism* and *Apophlegmatism*. *Schröder*.

DIACOCCEMELON, *διακοκκυμήλων*, from *κοκκύμηλον*, a Plum. The same as *DIAPRUNUM*, which see.

DIACOCHLACON, *διακοχλάκων*, from *κόχλακες*, Flints, an Epithet of Milk, in which red-hot Flints have been extinguished. *Hippocrates*, *Lib. 7. Epid.* calls it *διαπεπρωμένων*.

It is remarkable, that Milk, wherein red-hot Flints have been extinguish'd, is a most powerful Sudorific.

DIACODIUM. From *δια*, and *κώδεια*, a Poppy-head.

It is thus prepar'd:

Take of white Poppy-heads, well dried, fourteen Ounces; and, after twenty-four Hours Infusion in four Quarts of Spring-water, boil them well; and, to the expressed Liquor, put twenty-four Ounces of Sugar, to be boiled into a Syrup.

The new Dispensatory of the College makes this differ from the former, both in rejecting the black Poppies, and in the Proportions; the white here answering to the Quantities of both before. This Syrup will not bear the usual way of Clarification, without losing much of its Strength as an Opiate. And such Difference will happen on one account or other, tho' made with the utmost Care, as renders it difficult to be found always of the same Strength.

This Preparation is also called by the Name of *Syrupus de Meconio*.

DIACOLOCYNTHIS, *διακολοκυνθίδων*, from *κολοκυνθίς*, Colocynth; a Remedy of which Colocynth is a principal Ingredient.

The *Pilulæ Diacolocynthidos* are thus prepar'd:

Take Aloes, Colocynth, Scammony, Bdellium, black Hel-lebore, Gum Arabic, of each two Drams; Euphorbium and Nitre, of each one Dram: Make them into Pills with solutive Syrup of Roses.

These are in the *Augustan* Dispensatory by the Name of *Pil. de Nitro*; but the Composition has *Alexander Trallianus* for its Author, who gives it under the Title it bears here, *de Hemierania*, *Lib. 1. Cap. 12.* where he pronounces it effectual in purging off viscid, cold, pituitous Humours from the extreme Parts, and to be good to restore the Vigour of the Nerves, as well as to remove their Impediments. *Monardus*, *Lib. 13. Epid. 6.* prodigiously commends them in the Epilepsy; and affirms that they excel the *Hieræ*, in fortifying the Stomach, and removing Ischiadic Pains. The Gum Arabic seems intended as a Corrector of the Euphorbium, as it may entangle its violent active Parts, and make its Operation more tolerable; but it is to be fear'd, that Ingredient is here in too large a Proportion, notwithstanding such Precaution. The Dose of this is from fifteen Grains to half a Dram: And in robust Constitutions there is hardly any Cathartic of equal Efficacy to cleanse away the most obstinate Humours.

DIACOMERON. The Name of an Antidote in *Myrepsus*, *Antid. Cap. 39.*

DIACONES, *διακόνες*, from *ἀκόννη*, a Whetstone. The Name of a Plaister invented by *Crito*, and prepared of a Whetstone. *Galen Lib. 6. de C. M. P. G. Cap. 2.*

DIACOPE, *διακοπή*, from *κόπτω*, to cut, in *Hippocrates*, *7 Aph. 24.* and, *Lib. de Capitis Vuln.* signifies a deep Cut or Wound; and the Verb *διακόπτω* is often used by him to the same Purpose.

DIACOPRÆGIA, *διακοπεργία*, from *δια*, of *κόπρος*, Dung, and *ἄξ*, a Goat; is a Remedy prepared of Goats Dung against Disorders of the Spleen, and the Parotides. *Blancard*.

DIACORALLIUM *Alexandri*, a Medicine so call'd, not from Coral, but *Corallia*, a Name of the *Anagallis*, or Male Pimpernel, being not of an astringent, but penetrating Quality.

But the *Diacorallium*, in the *London* Dispensatory, is call'd thus, because Coral is a principal Ingredient therein. See *CORALLIUM*.

DIACORONOPodium, *διακορωνοπόδιον*. The Name of an Antidote in *Trallianus*, *Lib. 11.* prepared of the Herb *Coronopodium*, or *Coronopus*, with other Things.

DIA-



**DIACORUM**, δι' ἀκόν, a cephalic Medicine prepared of the *Scorus*, or *Calamus aromaticus*; it was invented by *Mesue*, and is describ'd in the *Ausburg Dispensatory*.

**DIACRISIS**, διακρίσις, from διακρίνω, to judge, distinguish, occurs in *Hippocr. Lib. περι γυναικ.* where we read, καὶ ἀπὸ τούτων αἱ νόσοι γίνονται, ἢ αἱ ἐκ νόσων διακρίσεις, “from these [four Humours] proceed Diseases, with their distinguishing Characters.” *Diacrisis* is also a Name in *Oribasius Med. Coll.* for the *Delphinium*.

**DIACROCIIUM**. A Name for the *Eleutarium de Ovo*, in *Platerus, de Curat. Februm pestilentialium, Tom. 2. Cap. 2.*

**DIACROCU**, δια κρόκου, διακροκον, from κρόκος, Saffron; the Name of a dry Collyrium in *Ægineta, Lib. 7. Cap. 16.* whose Basis is Saffron.

**DIACURCUMA**, from *Curcuma*, a Word which *Fuchsius* thinks *Mesue* used for Saffron; the Name of several Antidotes in *Myrepsus*, of which Saffron is a principal Ingredient.

**DIACYDONIUM**, δια κυδωνίων (μήλων,) from κυδώνιον (μήλον,) a Quince; a Remedy prepared of the Juice of Quinces, for which see *CYDONIA*.

**DIADAPHNIDON**, δια δαφνίδων, from δαφνίς, the Bay-tree, or Bay-berry; the Name of a drawing Plaister, prepared of Bay-berries and other Ingredients, and described by *Celsus, Lib. 5. Cap. 19.*

**DIADEMA**, διδάημα, from δέω, to bind, in a strict Signification means a Bandage for the Head, under Pains of that Part, and a Danger of Relaxation of the Sutures. *Castellus*.

**DIADESIS**, or **DIADOCHE**, διάδεξις, or διαδοχή, from διαδέχομαι, to succeed. A Succession of Humours; or, to speak more intelligibly, a Transmigration of Humours from one Part to another, which more generally is call'd a Metastasis of the Humours, when one Distemper succeeds, or is converted into another. It is also call'd *Diadoche*.

**DIADOSIS**, διάδοσις, from διαδίδωμι, to distribute, dissipate, or, in Medicinal Authors, to remit. The Distribution of the Aliment over all the Body; and in this Sense it is the same as *ANADOSIS*. But this Word more frequently implies, a Remission or Relaxation of a Disease, and its Symptoms.

**DIÆRESIS**, διαίρεσις, from διαίρω, to divide, or separate. A Division or Separation of the Vessels. *Galen* understands by it, any Solution of Continuity, whether brought about by a Wound, Contusion, Erosion, or Rupture. Hence

**DIÆRETICA**. Corrosive Medicines.

**DIÆTA**, διαίτα, διαίτη, is a Way and Method of living, comprehending what we call *Diet*, and whatever else concerns the Management of human Life; for we must not imagine that by *Diæta* we are to understand only Meat and Drink; for every thing which may be serviceable to the Body will fall within its Limits. “I call *Diæta*, says *Galen, Com. 3. in Lib. 3. Epid.* “not only what consist in Eating and Drinking, “but in all other Things, as Rest, Exercise, Bathing, Venerary, Sleep, Waking, and whatever else, in any respect, “concerns the State of the human Body.” In the same Sense are διαίτησις and διαίται to be taken, in *Lib. 6. Epid. Sect. 8. Aph. 43. 48.* And διαίτημα, in *Aph. 46.* of the same Section, and in *Lib. de Natura Hominis*, are of the same extensive Signification. In the same Latitude are used the Verbs διαίταειν, and διαίτᾶν, διαίτᾶσθαι, and διαίτᾶσθαι. Thus, (*Lib. 1. περι γυναικ.*) διαίτᾶν λυτροῖσι, “Let there be a “proper *Diæta* with respect to Bathing.” And in the same Book, διαίτομένη δὲ ἡ γυνὴ περιγίνεται, “The Woman, “if kept to a proper Regimen, will survive, and do well.” See *ALIMENTA*.

Tho' *Pliny* the younger uses this Word for any Place where Aliments are eaten, or what we commonly call a Dining-room; and tho' some of the later and less pure Authors mean no more by it than a public Convention of Men for regulating Matters, or transacting Business of any kind; yet the *Diæta* of the *Latins*, and the *Diæta* of the *Greeks*, in their most common and genuine Signification, import no more than what we call *Diet*, or Manner of Living.

Everyone who allows himself to think, must undoubtedly be convinced, that the Dietetic Part of Medicine is of the last Importance to Mankind, not only in preventing, but also in curing Numbers of those Disorders to which the State and Condition of human Nature subjects us; and as the celebrated *Frederic Hoffman* has not only shewn, that this, as well as the other Parts of Medicine, is founded upon scientific Principles, but has also given full, tho' short and succinct Directions, with respect to the Diet and Manner of Life, proper for the robust and vigorous, the weak and tender Persons of different Ages, distinct Sexes, and opposite Constitutions, as also in the various Seasons of the Year, and during the different States of the Weather; we shall therefore present the Reader with that excellent Author's Thoughts upon this Subject:

As no Substance is absolutely, and of its own Nature, Vol. II.

either salutary or noxious; but derives either the one or the other Quality from its particular Relation to the human Body; so 'tis certain, that the Effects of the Non-naturals must bear a direct Proportion to the different Constitutions of those who use them; since, in these, their Consequences must vary, and prove either of the salutary or the noxious Kind, according to the different Causes which concur to produce them:

Hence 'tis obvious, that the Physician acts a preposterous and unaccountable Part, who to every one prescribes one and the same Method of living; or thinks that what contributes to the Health of one, will prove salutary and beneficial to all, without Distinction or Reserve: For we are sufficiently taught, by daily Experience, that all Substances are not equally adapted to all Patients; and that what one may bear without being sensible of any bad Effects, may to another not only prove prejudicial, but also fatal. Time itself has a considerable Influence in determining the salutary or noxious Effects of Aliments, since some Substances may safely, and without any bad Consequences, be us'd at one Season, which at another will contribute not a little to the Destruction of Health.

The salutary and noxious Effects of Aliments are, for the most part, to be accounted for from the Diversity of Habits; for, as the divine *Hippocrates* observes, the Nature and Constitution of one Man differ from those of another. This Diversity of Natures may proceed either from a Difference with respect to Age, Temperament, Habit of Body, Custom, and natural Disposition; but most remarkably from a Difference with respect to Strength and Weakness.

As, in general, there is a vast Disparity among Mankind, with respect to Strength and Weakness; so the State and Condition of vigorous and robust Bodies must be widely different from those which are weak and infirm. For this Reason we are always to have a sacred Regard to the Diversity of Constitutions; since this is a Circumstance of the highest Importance, in the Dietetic as well as the Therapeutic Part of Medicine.

That Man is said to be strong, who is furnish'd with a remarkable Strength and Power, not only in exerting the voluntary Motions; but also in whom the vital and animal Actions are perform'd with Vigour and Energy; or, to render the thing still more clear, who can lift heavy Burdens, undergo great Fatigue, both of Body and Mind; who eats plentifully, and regularly discharges the excrementitious Parts of his Aliments by Stool; who sustains no considerable Injury by Watching, and the Use of various improper and less salutary Aliments.

The Man who has a robust and athletic Body, has also generally a courageous Soul, and a cheerful Temper, is not readily subject to Diseases and Disorders of the Mind, nor easily hurt by external Objects.

As every moving Force depends partly upon the Instrument by which the Motion is immediately perform'd, and partly on the Activity and Energy of the moving Cause; so it follows of course, that the Strength of the human Body proceeds partly from the Hardness and Bulk of the Muscles, and partly from the free and copious Influx of a laudable Blood, and nervous Fluid, into these Parts.

The Strength, therefore, of the Body is discover'd by the Largeness and Capacity of the Vessels, the Thickness of the Nerves, and the Solidity of the Muscles; for the Strength of the Body, with respect to the solid Parts, is deriv'd from the Disposition of Parents, but, with respect to the Fluids, from a due and proper Regimen in the Use of the Non-naturals. Among robust and vigorous Men, we reckon such common People as are accustomed to hard Labour, and live upon simple and coarse Aliments; such as are in the Flower of their Youth, and advanc'd to the State and Condition of Men; such as are of a sanguine and choleric Habit; such as are not too fat, and of a spongy Texture, but have solid Bones, tense Nerves, firm Tendons, and capacious Vessels. With respect to Nations and Climates, the *Westphalians*, the *Pomeranians*, and the Inhabitants of *Brunswick* in general, belong to the Class of hardy and robust Men. But those are of a more weak and feeble Nature, whose Fibres are either tender, and endued with an exquisite Power of Sensation, or subject to undergo heterogeneous and preternatural Motions; who are easily disorder'd by the Operations of their Passions, and whose narrow Vessels are not furnish'd with a sufficient Quantity of laudable and spirituous Blood; whose Tendons and Nerves are small and lax; whose Teeth are fewer than the natural Number, and who are easily fatigued both in Body and Mind.

Persons of weak Habits are not only easily injur'd by external Causes, and fall into Diseases on the slightest Occasion; but also, when actually seiz'd with a Disorder, their Condition is worse than that of the Robust and Hardy, since their Minds are fickle and inconstant, and their frail Bodies incapable of supporting the Shock of the Disease for any considerable Time. Among the Number of the Weakly and Tender, we may justly reckon Infants and old Persons; such as are addicted to an



idle Town-life, constant Study, and close Meditation. The Generality of Women also belong to this Number; and the *Swabians*, and Inhabitants of *Meissen*, are, if we may be allow'd the Expression, nationally weak. Those are also to be accounted among the Number of the Weak and Infirm, whose Strength is considerably impair'd by the Shock of some violent Disease, by long Watching, protracted Hunger, long-continu'd Grief, too liberal Venesection, violent Hæmorrhages, or the too frequent Use of Purgatives. To this Class, in a particular manner, belong Women in Child-bed, and those whose Menses are immoderately discharg'd. Persons of a weakly and tender Habit are discompos'd and disorder'd by the Smell only of sweet-scented Substances, have copious Evacuations from a small Dose of any emetic or purgative Medicine, and are put out of Order by Aliments either of the flatulent or acid Kind, as also by the most gentle Blast of cold Air.

Since the Weakness of the Body, and its preternatural Disposition to receive the Impressions of morbid Motions, generally proceed from a Penury of laudable Juices, it ought therefore to be the principal Care of the Physician, who intends to strengthen the Body, and fortify it against external Injuries, to fill the Vessels and Nerves with laudable Juices, whilst he evacuates the superfluous Humours, and removes them from the Body. Hence it is obvious, that weak Persons, who, in consequence of their Constitutions, are subject to a Train of Disorders, and are incapable of bearing any Excess, are much more safely and easily restored to Health, by a moderate and well-ordered Regimen, than by the drastic and more operative Medicines of the Shops.

None certainly ought to be more careful in living up to the strictest and most rigid Rules of Health, than the Weak and Tender, because, by the slightest Error in Diet, they are signally injured, and, by their Sufferings, sufficiently prove, how great Power and Influence the Use or Abuse of natural Things have on the human Body.

The Weak and Tender ought to be, in a particular manner, careful to preserve, as much as possible, their Perspiration and Concoction entire and uninterrupted. In order to assist Concoction, they must indulge themselves somewhat freely in Sleep, before Meals ventilate their Bodies, not by vehement, but moderate Exercise, and eat but sparingly. Substances which are acid, hard, flatulent, saltish, or sweet, are to be carefully abstain'd from, since, in Persons of weak Habits, they are easily converted into a Substance of a sourish Quality, which proves injurious to the Constitution. 'Tis also expedient they should shun northerly Winds, preserve a serene Tranquillity of Mind, and guard against every thing, which borders upon Excess or Intemperance.

Since the Man, who is robust, and, in every respect, sound and vigorous, is not easily injur'd by Excess, for that Reason he ought not, according to *Celsus*, in *Lib. 1. Cap. 1.* "to confine himself rigidly to the strictest Rules of Health, but to vary his Method of Living, and accustom himself to every thing." But the same Author, in the End of the Chapter now quoted, beautifully and justly observes, that the Vigorous and Robust ought to take care, "lest, in a perfect State of Health, those Things should be consumed, which, in Sickness, are of the greatest Benefit and Advantage;" that is, lest the Strength, which is the most efficacious Medicine for subduing Diseases, should be impair'd.

The Weak and Tender, among whom *Celsus* reckons the *Literati*, who, by the constant Labours of their Minds, impair their Strength, and dissipate their Spirits, ought, by all means, to use such a Regimen and Method of Life, as may assist Concoction, promote Perspiration, and recruit their Strength. Men addicted to Study ought, therefore, when at Meals, to be entirely free from uneasy Cares, or deep Meditations. But the most favourable Time of applying to Studies is in the Morning, and when the Concoctions are finish'd. Studious Men ought also to use tender and light Aliments, which generate subtle and sufficiently fluid Juices in the Body; but they must abstain from flatulent and leguminous Aliments, Pease, Beans, thick Ales, and bad Wines, which oppress the Head, blunt the Senses, and cloud the Genius; for Ales and Wines, the finer they are, the more they contribute to the Health of the Studious. And because a due Concoction of the Aliments is highly beneficial to the Brain and Nerves, and generates a large Quantity of Animal Spirits, hence sufficient Sleep ought warmly to be recommended to the Studious; for as much of the Sleep as is taken away, so much of the Strength necessary to go through the Studies of the Day is lost. Men of a studious Turn ought also to take care, lest, by too close Application, they enervate their Bodies, and render them subject to the Attacks of various Diseases. 'Tis far more expedient and eligible to unbend the wearied Mind at proper Intervals, that thus it may return to the Exercise of its Functions with fresh Vigour, and a new Degree of Alacrity. Nothing also is more prejudicial to Health, than constant Sitting, a Practice too common among the Studious, and by which they bring upon themselves those hypochondriac

Disorders, and costive State of the Belly, usual among the Men of this Class.

In the dietetic Part of Medicine, great Regard is to be had, not only to those, whose Bodies are corpulent, and filled with a large Quantity of Humours, but also to those, who are of a thin and slender Habit.

Those who are corpulent, and abound either with Serum or Blood, are greatly disposed to Diseases, suffer very considerably, as well from Commotions of the Mind, as Things external, such as Cold and Heat; and, when seized with any Disease, recover with Difficulty.

Those, who are corpulent, and full of Humours, ought, above all things, to take such Measures, and use such Aliments, as extenuate the Body, and evacuate its superfluous Humours. These Intentions are answer'd by warm Water, mineral Waters, hot Baths, Watchings, violent Exercise of every kind, acid and saltish Substances, eating once a Day, gentle Vomiting and Purgings, which must not be excited by too strong and drastic Medicines, which generally prove more hurtful than beneficial in Cases of this Nature.

For such as are of a thin and slender Habit, those Substances are most proper, which preserve the Strength, and nutritious Juices, and hinder their Dissipation: For this Reason, moderate Exercise, frequent Rest, a soft Bed, Serenity of Mind, as much Aliments as the Stomach can with Ease digest, sufficient Sleep, the Use of Baths after Dinner, sweet Substances used with their Aliments, cold, and whatever generates laudable Juices, and retains them in the Body, are highly proper for Persons of lean and slender Habits. But Vomiting and Purgings of every kind are highly detrimental to Patients of this Class.

As some Persons are, at certain Seasons, costive, and, at others, have their Bodies preternaturally soluble, these must also use a particular Diet, and observe a peculiar Regimen.

Those, who are costive, must use such Aliments as have a Tendency to render the Body soluble, and Wines, especially of the sweet Kind, together with saline and oleous Substances. If these should prove ineffectual, *Celsus* advises the Use of Aloes; but, at the same time, they must abstain from the frequent Use of Purgatives. Those, on the contrary, whose Bodies are preternaturally soluble, ought to restrain this Disposition by violent Exercise. For Persons in this State, Hunger is also proper, as also a small Quantity of Drink, which is to be us'd rather cold than hot, if no other Circumstance forbids it. Having thus consider'd the Diet and Regimen proper for the Robust and Vigorous, and that adapted to the State of the Weak and Tender, we shall now take a View of those suited to Persons of different Temperaments, different Ages, and the various Seasons of the Year, or States of the Weather.

A Temperament, then, is nothing but a certain Habitude and Disposition, both of the solid and fluid Parts, to perform the Circulation of the Blood, the several Motions necessary in the animal Oeconomy, and the various Functions, whether natural, vital, or animal. 'Tis sufficiently confirm'd by Experience, that the Strength of the Body bears a Proportion to the Circulation of the Blood, and its Influence on the solid Parts; and that, by this very means, the Digestion, the Secretions and Excretions, and, which is more, the Inclinations of the Mind, the Morals, and the Turn of Genius, are considerably vary'd; so that 'tis certain all these Changes draw their Origins from the different Manners, in which the Circulation of the Blood is carry'd on.

In what we call a choleric Temperament, the Fibres are very tender, and highly tense. The Vessels also are narrow, and the vital Juices driven thro' them by a strong moving Force. Hence it is, that, in Persons of this Temperament, we observe a certain Precipitancy of Mind, and a certain Velocity or Quickness in the other Functions of the Body: And because, in Persons of this Temperament, the Blood is quickly forc'd through the Vessels, it is, by this very Means, render'd hotter, and its sulphureous Parts are exalted.

People of this Temperament ought carefully to abstain from every thing, which can either increase the Heat of the Body, or accelerate the Motion of the Blood, but ought rather to use such Substances, as, in some measure, check this rapid Motion, and procure to it a certain Temperature or just Medium, which is the best and most efficacious Preserver of Health. For this Reason, choleric Persons are considerably injur'd by long and violent Exercise; by laborious Motion; by aromatic, hot, and pinguious Aliments; by spirituous Liquors, especially generous Wine, Brandy, and strong Ale; by the scorching Heat of the Sun, immoderate Commotions of Mind, drastic Medicines, Purgatives, Sudorifics, Volatiles, too long protracted Watchings; and, in general, every thing which has a Tendency, either to accelerate the sulphureous Intemperature of the Humours, or increase their Heat. Choleric Patients are also endanger'd by all things which are excessively cold, whether the cold Air, or Draughts of cold Liquor, since these are of such a Nature, as to reduce the Blood, already too thick, and destitute of its due Humidity, into a viscid and tenacious Kind of Glee.



Hence generally arise the violent Inflammations and Fevers of choleric Patients. But the Health of choleric Persons is most effectually provided for by warm Infusions, liberal Draughts of some proper Liquor diluted with Water, boil'd Water, Water mix'd with Wine, all moistening Aliments, temperate Stoves, warm Beds, and spacious Rooms. In a Word, Persons of this Temperament ought to observe a due Medium in every thing; and, if they find themselves costive, their Bodies are to be render'd soluble, not by the more drastic Purgatives, but by the mild and gentle Laxatives, such as Raisins, Manna, Rhubarb, Tamarinds, and Aloes.

In Persons of melancholic Temperaments, the Blood, in consequence of the Hardness and Density of the Fibres, is carry'd thro' the Vessels with a slow and languid Motion. Hence the Humours become thick, and all the Actions, whether of the Body or the Mind, are perform'd with a certain kind of Difficulty. To Patients, therefore, of this kind, all those things prove injurious, which thicken and inspissate the Juices, and still more retard and check their slow and languid Circulation. Melancholic Patients, as their Veins contain a Blood which is thick, and less susceptible of a brisk and lively Motion, ought, for that very Reason, to abstain from thick and acid Foods; from Flesh and Fish of a firm and compact Texture; from Puls; from thick and strong Ales, which throw the Fluids into too violent Commotions: Nor is an Air, which is either too hot or too cold, so proper for their Condition; because the Atmosphere, in both these States, diminishes the Fluidity necessary to the human Juices. All immoderate and exorbitant Passions ought also to be banished from their Minds, such as Anger and Dread, since these, by more forcibly impelling the inspissated Blood into the Cavities of the capillary Vessels, generally prove highly injurious to their Health. On the contrary, the Health of melancholic Persons is provided for by proper Motion and Exercise, not perform'd suddenly, but gradually augmented; by liberal Draughts of moistening Liquor; by generous Wine moderately drank; by Venesection; and by Aliments moderately season'd with Aromatics. It is also expedient for Persons of a melancholic Temperament to eat moderately, to labour, to walk abroad in a serene and moderately warm Air, and to use a Variety of innocent Diversions and Recreations.

In Persons of a phlegmatic Temperament, Serum abounds; the Circulation of the Humours is highly slow and languid; and all the Actions, whether of the Body or the Mind, are perform'd with a certain Laziness and Torpor. It is therefore expedient to add a *Stimulus* or Spur to the slowly moving Blood, to restore the Strength and Vigour of the Parts, and to reduce the cold and moist Intemperature of the Humours to a drier State.

As the Blood, in Persons of this Temperament, performs its Circulation slowly, hence the Health of the Phlegmatic is excellently consulted by roasted Fleshes season'd with Salt and Aromatics, by Ale which is moderately strong, and by rich Wines. Persons of this Temperature must be very careful to use due Exercise, which excellently discusses and throws off the superfluous Humidity and Moisture of the Body. But 'tis absolutely necessary they should abstain from autumnal Fruits, and crude Vegetables; and that they guard against a moist and rapid Atmosphere; such as that generally observ'd in narrow and low Places in the Autumn. They must also banish all sad and melancholy Thoughts, and carefully pursue such things as procure Vigour, Alacrity, and Cheerfulness, to the Mind.

Those are said to be of a sanguine Constitution, whose Habit of Body is spongy and lax, whose Veins are numerous, but small, narrow, and through which the Blood flows gently and easily. Since, therefore, this Temperament is greatly dispos'd to generate a large Quantity of Blood, Persons of a sanguine Habit ought, for this very Reason, to abstain from such things as generate a superfluous Quantity of this Fluid.

The Health of the Sanguine is most effectually preserv'd by Sobriety, Temperance, and what we call a hard Method of Living. Persons of this Class ought carefully to abstain from sweet Substances; from spirituous Liquors, such as Wine and Brandy; from eating too large Quantities of Flesh; from nourishing Ales; from Pork; and from too much Sleep. Moderate Exercise is also highly beneficial to them, and they ought, if possible, to live in a temperate Air; since the Atmosphere, when either immoderately hot, or excessively cold, generally proves prejudicial to their Health. Draughts of thin diluting Liquors, Infusions of Herbs, warm Water, and Venesections, contribute not a little to their Preservation: And since the Sanguine are naturally disposed and inclined to critical Evacuations of Blood, we are to be particularly careful not to suppress these.

As the State and Condition of the human Body, both with respect to its fluid and solid Parts, is not the same at all Periods of Life, so neither is the same Regimen and Method of Living suited and adapted to Persons of different Ages. At certain Seasons of Life, the human Body grows, arrives gradually at its full Vigour, and at last, losing its Strength, decreases by degrees. In every Period of Life, the State of the Body is found to vary, because not only the Fluids undergo a Change, with

respect to their Temperature and Quantity; but also the Solids, with respect to their Fitness and Disposition to perform their proper and respective Motions. Different Regimens and Methods of Life are, therefore, necessary for different States of the Body, and consequently for Persons of different Ages.

As in framing dietetic Laws, and laying down the Rules of Regimen, we ought, above all things, to have a due Regard to the Strength or Weakness of the Patient; so, in like manner, since the Strength of every one differs in different Periods of Life, we cannot lay down accurate and judicious Rules of Regimen, without a previous Investigation of the Nature and Degree of Strength peculiar to each different Age.

Infants, Children, and old Persons, are to be reckon'd among the Weak and Tender; whereas young Persons, and those arriv'd to the State of Manhood, are to be consider'd as robust and vigorous. Different Regimens must, therefore, necessarily be prescrib'd for Persons in these so opposite States.

Infants, on account of the Tenderness and Sensibility of their Fibres, are easily injur'd, and become subject to Diseases, by any thing of a noxious Nature; for which Reason the Physician ought to be very cautious and circumspect in prescribing a Regimen for them.

Human Creatures, before they arrive at the Use of Speech, are call'd Infants; and, from that Period, till they arrive at Puberty, they are said to be Children. Infants are much subject to violent Disorders of the nervous System, as is obvious from the Spasms, Convulsions, Gripes, Epilepsies, Startings, Fevers, and Pains, with which they are afflicted. This is also certain from their being subject to the most terrible Disorders, and sometimes to Epilepsies, by sucking the Milk of a Nurse, whose Mind is disturbed and ruffled by the Fury of tempestuous Passions. Their tender and delicate State is sufficiently prov'd by their being frequently purg'd by the Milk of the Mother or Nurse, who has, the Day before, taken a purgative Medicine; and by their being indispos'd by every considerable Error in Diet committed by the Woman, who gives them Suck; if, for Instance, she has drank Brandy, admitted of the Embraces of a Man, us'd acid or flatulent Aliments, or if the cold Air has had Access to her Breasts.

As Infants, with respect to Strength and Weakness, differ very much from each other, so a different Diet and Regimen are to be prescrib'd for them: Nor is one and the same Milk suited and adapted to all Children without Distinction; for we observe, that the Bodies of Infants, with respect to the Strength and Texture of their Parts, differ very widely from each other: For those who are propagated from sound and vigorous Parents, such as the Country-people and Labourers, are neither easily injur'd by any thing, nor generally subject to Diseases. On the contrary, Infants sprung from weak Parents; from such as are either too young, or too old; from such as are valetudinary, or addicted to Intemperance and Drunkenness; are easily injur'd, and highly subject to the Attacks of Diseases. Infants also differ with respect to their peculiar Habits of Body; for those whose Flesh is spongy, and rises too speedily in Fat, and such as have tender Nerves and Tendons, are much obnoxious to Disorders; nor are they so sprightly and lively as those of the opposite State. Those, on the contrary, have their Health establish'd on a surer and less precarious Foundation, whose Flesh is compact and firm, whose Nerves are solid, and whose Tendons and Membranes are sufficiently tense. We must also observe, that one Infant is more subject to spasmodic Disorders and Convulsions than another. Neither ought we to forget, that Infants sprung from Parents who give a Loose to their Passions, and indulge themselves in delicate and high Living, which is generally the Custom of the Grand and the Opulent, do not live so long as the Children of other People, and are principally subject to those Disorders, which draw their Origin from a Weakness of the Nerves. For Infants of this Class, a mild Diet, and a strict Regimen, ought to be prescrib'd.

Nothing is more destructive of the Health of a sucking Child, than too liberal a Repletion with Milk; for as every kind of Repletion is hurtful to Nature, and injurious to the Digestion, it is, of course, to be so much the more apprehended in so weak and tender a Patient; for this Reason the universal Practice of Nurses is to be condemn'd, who, when Children are indispos'd, or cry, force the Breast upon them, often against their Inclinations; by which means they clog the Stomach with Milk, increase its Crudities, and add new Vigour to the Disorder: For all Substances, not duly digested by the Stomach, stagnate in the Primæ Viæ, become acedous, and are corrupted. Hence *Hippocrates* justly affirm'd, that Nurses, by their preposterous Method of suckling Children, often put an End to their Lives.

A sufficiently thin and fluid Milk is to be us'd by Children; for such as is thick, and impregnated with too large a Quantity of buttery or cheesy Parts, is productive of the worst of Consequences, because it cannot be sufficiently digested and distributed by the Stomach. 'Tis, therefore, a Circumstance of the highest Importance carefully to examine the Milk of Nurses, with a View



View to discover its Consistence, and in what Proportion it contains the serous, the cheesy, and the buttery Parts. This Intention is most commodiously and accurately answer'd by Evaporation, by any statical Instrument, with which the specific Gravities of Ales and Waters are determin'd; as also by an Affusion of highly rectified Spirit of Wine, by which the Proportion of the solid to the fluid Parts may be discover'd. The buttery Part also of Milk may be investigated by suffering it to stand twenty-four Hours in a moderately warm Place.

Milk which is thick and pinguious, is of the worst Kind; and that is best, which is neither too thick, nor too thin and saline, and which is yielded by a sound and healthy Nurse. A preternatural Thickness of the Milk may be corrected by moderate Exercise before Meals, by Infusions of the Seeds of Fennel, Anise, and Cumin, prepared with warm Water, and drank in the Morning upon an empty Stomach; as also by abstaining from too large a Quantity of Aliments.

During the first Months 'tis expedient the Infant should be suckled with thin Milk; but in Process of Time, or at a Year's End, Milk which is pretty thick, produces no bad Consequences, tho' new-born Infants cannot well bear it; for thick Milk obstructs the Vessels, whose Diameters are as yet narrow, and stuffs the mesenteric Glands, and the Villi and Mouths of the lacteal Vessels, with thick and tenacious Sordes. Besides, a large Quantity of thick Milk is, with Difficulty, carried thro' the Meanders of the Intestines by the peristaltic Motion; in consequence of which, it becomes tartish, and degenerates into a colliquated and corrupted Mass: Hence arise the uneasy Inflations, the Gripes, the Spasms, the painful Fluxes, the Watchings, the Epilepsies, and the Startings during Sleep, with which Infants are afflicted.

Infants are to be indulg'd in the Use of Milk for a longer time than a Year, since, by this means, they acquire a Degree of Strength, and a certain Firmness of the Parts, of which they would otherwise be destitute; but, if the Work of Ab-lactation is limited to six or eight Months, then the Infant is gradually to be habituated to Aliments which are thin, and easily concocted. Most Mothers are to be blamed, because, at the very time they are suckling their Children, they stuff them with Gruels prepared of Meal, Eggs, and Milk; a Species of Aliment, which, in consequence of its viscid and tenacious Nature, cannot fail to prove injurious. For this Reason, Aliments prepared of the Crumbs of Wheaten Bread, Water, and Butter, are far better suited to Children. The Health of Infants is also preserved by Infusions of Liquorice-root, and of the Herbs Paul's Betony and Germander; to which may be added, a Decoction of Barley, with Lemon-peel infused in it. The Use of this may also be prescribed to Nurses, for purifying their Milk.

We ought, above all things, to take care, that Infants labouring under a painful and difficult Dentition, or any other Disease, should not have too large a Quantity of Milk, because, in consequence of its Stagnation, it easily becomes corrupted, and exasperates the Disorder; for, under every violent Pain, the whole nervous System is affected, by reason of the surprising Consent of the Parts; for Pain produces a spasmodic Constriction of the nervous Parts, by which means the Tone and peristaltic Motion of the Stomach and Intestines, together with the Digestion, and several Excretions, are greatly disturbed, and the Evacuation of the Fæces by Stool prevented.

The younger the Infant is, the more proper it is to indulge it in long Sleep; but it is gradually to be wean'd from this Habit, in proportion as it advances in Age.

We must take care, that the Bodies of Infants be kept always soluble, and that they go frequently to Stool; for, as soon as they become coltive, we may infallibly conclude, that some Disease or other will soon attack them; for, as at all Periods of Life, so in Infancy, the regular and orderly Evacuation of the Fæces by Stool is an excellent Sign of Health, since it is a Proof of the Soundness of the nervous System, on which the Vigour of the peristaltic Motion of the Intestines depends. But a coltive State is always to be dreaded, because it denotes, that the Strength of the nervous Parts is impair'd; and, consequently, that the Body is disposed to the Attacks of Diseases. *Hippocrates*, in his Treatise *de Dentibus*, tells us, "That those Infants are sound and healthy, whose Bodies are pretty soluble, and whose Concoction is good; but that those are sickly and indisposed, who have scanty Discharges by Stool, and who, tho' furnished with a voracious Appetite, are not sufficiently nourished."

Nothing has a more direct and immediate Tendency to destroy the Tone of the Stomach and Intestines in Infants, than Purgatives of a strong and drastic Nature. Of this Kind are all Compositions of Jalap and Scammony; as also metalline Preparations, such as Aurum Fulminans, and Mercurius Dulcis, which, by remaining long in the Foldings of the Intestines, corrode their Membranes, after having brought on an Accession of acrid Humours to the Parts: For Infants, gentle Laxatives are far more proper; such as Preparations of Rhubarb, joined

with Absorbents; or Preparations of Manna, mixed with Extract of Rhubarb; for tho' we are perpetually to endeavour daily to eliminate the thick and viscid Recrements of the Milk by Stool, yet we are to be no less careful, that the Tone of the Stomach and Intestines should be preserv'd sound and entire; for, when this is either impair'd, or totally destroy'd, the Intestines never perform their Office in a due and regular Manner. Hence the most general and frequent Cause of the Diseases of Infants is to be deduc'd; for drastic Purgatives have this Unhappiness peculiar to them, that tho' they render the Body soluble for once, yet, by injuring, and perhaps destroying, the Tone of the Intestines, they afterwards produce Obstructions, and cause Retentions of the Fæces; a fruitful Source of various Diseases incident to Children. I have often, with Grief, observ'd and foretold this in Patients of Distinction, tho' this Truth has been the common Butt of the Ignorance and Malice of some Physicians. But this Opinion is supported by the Judgment of the celebrated *Ferrarius*, who, in his Treatise *de Art. Medend. Infant.* affirms, "That Infants, in consequence of their small Degree of Strength, are not able to bear highly alterative Medicines. Opiates produce the same Effects, prove highly injurious to the Habits of Children, and expose their Bodies to the Attacks of Diseases."

Infants and Children ought to eat little, but often; because the smaller the Quantity is, the better it is adapted for nourishing the Parts. This Rule of Regimen is supported by the Authority of *Hippocrates*, who uses the following Words: "Those who are in a growing State have a great deal of radical or innate Heat, and therefore require a great deal of Nourishment, otherwise the Body is consum'd." For, that the Bodies of Infants and Children may gradually become larger, they require a large Quantity of nutritious Juice, which ought to be gradually added to their Parts; but, since their tender Stomachs are not able to concoct a large Quantity of Aliments, 'tis therefore expedient, that they should be exhibited frequently, but in small Quantities; and the better the Foods are, with respect to their Qualities, the more effectually they are also calculated for nourishing the Parts.

In the Use of all the Non-naturals, whatever exceeds a due Temperature must be carefully kept from Infants and Children, to whom Wine, Brandy, and all Acids, are as prejudicial as to many Poisons, because they not only prevent the Nutrition and Augmentation of the Parts, but also prove injurious to the Brain and Nerves, the former of whose Functions they often disturb.

A moderate and equal Perspiration contributes not a little to preserve the Health of Infants and Children. For this Reason their Regimen is to be of the temperate Kind, and both their Beds and Chambers are to be warm, that they may be sufficiently defended against intense Cold. If they are otherwise manag'd, they are generally seized with Gripes and Hiccoughs. *Hippocrates*, in the sixth Section of his Book *de Alimentis*, informs us, "That those who perspire freely are weak, but healthy; and, if seiz'd with a Disease, easily recover: Whereas those whose Perspiration is obstructed before they are afflicted with a Disorder, are stronger, but then they recover with greater Difficulty." But a free Perspiration is highly necessary to Children, because they require a large Quantity of Nourishment, the greatest Part of which is again to be thrown out of the Body: The more effectually, therefore, this cutaneous Excretion is carry'd on, the more genuine and salutary the Nourishment of course becomes.

The Health of sucking Children principally depends on the Nature of the Milk, and the sound or weakly Constitution of the Nurse; for, since the Infant receives its Nourishment from the Woman who gives it Suck, it must necessarily sustain an incredible Injury by Milk, which is either of a bad Kind, or entirely depraved. Hence it happens, that Infants are generally seized with violent epileptic Disorders, by sucking the Milk of a Nurse whose Mind is disturb'd by the Sallies of Passion, or discomposed by the fatal Influences of Dread and Terror. When a Misfortune of this Nature happens, it is expedient to milk the Breasts frequently, taking care, at the same time, that none of the Milk be exhibited to the Child for twenty-four Hours after. For this Reason Nurses of good Morals, and sweet natural Dispositions, are to be chosen, if they can possibly be had; and we must always take care, that Milk of one and the same Nature be used by Children. But the Health of Infants is most effectually preserved by Nurses who are neither too old nor too young; who have only given Suck once before; and who have never suffer'd Abortion. A Woman is also better qualify'd for the Purposes of a Nurse, if she feeds upon laudable Aliments, drinks large Quantities of very thin Liquors, abstains from all Acids, from spirituous Liquors, from Substances tending to Putrefaction, from acrid Purgatives, from sleeping in the Day-time after Meals, and from Venery. It is also expedient she should, twice a Day, exercise the inferior Parts of her Body, and that her Breasts should not contain a thick and superfluous Milk.



We are, above all things, to take care, not to throw the Bodies of Infants into too violent Commotions, either by too great a Variety of Medicines, or such as are possessed of too drastic a Quality; but we are rather to use such as are of a mild and gentle Nature, such as do no Injury to the Tone of the Intestines, whilst, at the same time, they preserve the Perspiration free, entire, and uninterrupted. Drastring Preparations are never to be exhibited to Infants; and if at any time the State of their Health should seem to require any such thing, the Medicine is much more safely exhibited to the Nurse than to the Child, since it is confirm'd, by repeated and well-vouch'd Observations, that a Purgative or Laxative, taken by the Nurse, renders the Body of the Infant soluble.

Children, to whom Nutrition and Growth is necessary, must have Aliments frequently exhibited, but in small Quantities, and such as, by their Qualities, are adapted to nourish the Parts. 'Tis also highly necessary they should use moderate Exercise, and keep up a free and uninterrupted Perspiration, because, by these means, their Health is excellently preserv'd, and their Growth promoted. Children are by no means to be indulged in the Use of sweet Substances, Milk, and Cheese, because these contribute to the Generation of Worms, and bring on a Corruption of the Humours. They must also abstain from Wine, spirituous Liquors, and too violent Exercise, lest the Humours should be over-heated, and the Body, in consequence of the unseasonable Dissipation of its Fluids, deprived of the proper Materials necessary for its Growth and Nourishment. Children, who apply themselves to their Studies, must also abstain from Aliments of a gross and coarse Texture, or of a flatulent Quality, such as Beans, Peas, Millet, farinaceous Substances, and intoxicating Ales; for these not only weaken and impair the Strength of the Body, but also clog the native Force of the Genius, and impair the Understanding.

*Celsus* judiciously affirms, "That 'tis a Matter of less Moment what Aliments young Men use, or what Regimen they observe;" for Persons in a youthful State are possessed of great Vigour, and an uncommon Strength of the solid Parts. For this Reason young Men are not easily injur'd, nor ought they to be rigidly ty'd down to the Laws of a strict and severe Regimen.

In a State of Youth, however, as well as that of Manhood, a proper Medium is to be observed, and Persons, in both Conditions, are to eat and drink in such a manner, as to recruit and support, but not to oppress and destroy, the Strength of the Body, and the Powers of the Mind.

Men, at this Period of Life, ought to take particular Care, that neither cold Liquor, nor a chilly Atmosphere, get the least Access to their Blood, when overheated by hot and spirituous Liquors, or Motion; since, in consequence of this, a great Number of young Men are, by fatal Inflammations, prematurely deprived of Life.

Young Men, and such as are arrived at a State of perfect Maturity, ought carefully to abstain from hot Substances, and such as throw the Blood into preternatural Commotions. They must also avoid the more drastic Purgatives, and carefully guard against indulging themselves in the immoderate Transports of exorbitant Passions. But Venesection, if Necessity requires it, is not, at this Period of Life, to be condemn'd. *Baglivi*, when delivering his Sentiments on this Subject, uses the following memorable Words: "In young Men the Humours are generally convey'd to the superior Parts; but, in old Persons, they flow to such as are inferior: This, if Conjecture is allowable, depends on the preternatural Laxity of the Solids and Fluids in old People; and the too great Strength, Tension, and Elasticity of the same, in such as are young." For this Reason, says *Duretus*, in his *Comment. in Coac. Prænot.* "Burning Fevers, in young Men, have a Solution by an Hæmorrhage from the Nose; and, in old Men, by a Dysentery. But that these may happen, as, according to the Dictates of Nature, they ought, the Mind must necessarily be free from every Care, that by this means the Spirits may, without Interruption, flow to all Quarters, and perform their Office in every Part, according to the fix'd and stated Laws of Nature; for, when the Mind is rack'd with Care, wrapt up in Study, or disturb'd and tormented with the intricate and perplexing Affairs of Civil Life, the Circulation of all the Fluids is variously disturb'd; and they are, in a tempestuous Manner, convey'd here-and-there, to Parts where they ought not naturally to be."

It contributes not a little to the Preservation of Health, to enure and habituate the Body, from the very Dawn of Youth, to hard Labour, spare Living, and rather to a cold than too hot an Air.

The Regimen and Diet of old Persons require the strictest Care and Attention, since they may be justly reckon'd among the Number of the Weak and Tender; for the more their Strength is impair'd, the more readily and effectually their Bodies are disposed to be injured by external Objects.

For Persons at this Period of Life, Moderation, Tempe-

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rance with respect to Meat and Drink, and Tranquillity of Mind, cannot be too warmly recommended; for every Excess is injurious to the Nature and Constitution of old People: For this Reason, such as are pretty far advanced in Years are carefully to abstain from too liberal a Repletion with Aliments, from the frequent Use of Wine, especially of the acid and tartareous Kind, from Food of bad Qualities, from such Substances as are saline, acid, hard, and with Difficulty digested by the Stomach.

Nothing is so prejudicial to the Health of old Persons, as violent Cold, and the frequent Use of Acids; for, in the Decline of Life, the Blood moves slowly thro' the Vessels; and all the Excretions, which contribute to the Preservation of Health, become languid: Hence the Humours are inspissated, and acquire a Tendency to Stagnation. Since, therefore, Cold and Acids divest the Humours of their due Fluidity, and impair the natural Heat, the Reason is obvious, why they should be destructive of the Health of old Persons, and contribute greatly to the Production of those Disorders, with which they are generally afflicted. Some Sorts of Aliments soon become acid in the Stomachs of old Persons; for which Reason, Preparations of Milk prove highly prejudicial to them.

The Health of old Persons is best preserved by such Substances as are quickly digested, especially for Supper; since, by this means they enjoy sounder Sleep, which never fails to afford singular Relief to Persons advanced in Years.

The more nearly the Aliments of old Persons approach to Simplicity, and a due Temperature, the better they are adapted to the Preservation of their Health.

Persons advanced in Years are not, without the most urgent Reasons, to change the Method of Life, to which they have been long accusom'd, whether with respect to Exercise or Aliments.

As a moderate Transpiration is highly conducive to the Health of old Persons, this Evacuation is, therefore, to be carefully preserved, and duly carried on. Now 'tis certain, that Transpiration is excellently assisted and promoted by due Motion and Exercise in a temperate Air; as also by strong and generous Wine, which not only forwards this Evacuation, but also procures Strength and Vigour to the whole Body; for which Reason it is by some call'd the Milk of old Men. This Intention is also answer'd by Infusions of Aromatics, such as Sage and Baum, together with Lemon-peel and Cinnamon: But intoxicating and sulphureous Wines, or such as are possess'd of an acid and astringent Principle, are highly injurious to old Persons, because they render them costive, and prevent the due Discharge of the Urine.

Venesection is of singular Service to old Persons; but is principally to be used when they have sufficient Remains of Strength, when their Appetites are entire, and when the whole Body is still possess'd of a due Degree of Energy and Vigour. Most old Persons might protract Life longer than they really do, if they did not wilfully and obstinately despise Venesection; for a Redundance of Blood, to which old Persons, in consequence of their sedentary Lives, and free Living, are inclined, puts an End to the Lives of many; for it brings on Scurvies, Infarctions of the Viscera, Consumptions, lethargic Disorders, and Apoplexies.

Such old Persons, as by any means are destitute of a Power of exercising their Bodies, ought, by Frictions, to promote the due Circulation of their Blood.

Persons advanced in Years ought carefully to abstain from the too liberal Use of Flesh; and boil'd Vegetables, such as Raisins, Prunes, and Apples, are far better suited and adapted to the Preservation of their Healths. Flesh generates too large a Quantity of Blood in the Body, which, since old Persons are averse to Exercise, not only proves highly injurious to them, but is the principal Cause of the Disorders with which they are generally afflicted. The Health of old Persons is far better consulted by soft Pulses, Pot-herbs, and Fish; since these contain but a small Quantity of nutritious Juice. *Baglivi* has a memorable Observation to this Purpose: "In the Course of Practice, says he, a Physician may observe, that some Patients, subject to Defluxions, and chronic Disorders, recover in Lent; but begin again to languish in Easter, by their eating Flesh. He may also observe, that some Disorders are removed by eating Roots, Pulses, Pot-herbs, Fish, and other Aliments of a like Nature; whereas the same Disorders are augmented by Flesh, and other Aliments of rich Juices."

Old Persons are highly injured by Purgatives, and all violent Commotions of Mind; for the more weak and tender the Body is, the more Injury it sustains by any Intemperature or Excess.

At different Seasons of the Year, different Regimens are also to be used, because a Change in the State of the Atmosphere induces a proportionable Alteration in animal Bodies.

In the Winter the Fibres, in consequence of the increased Elasticity of the Air, are more strong, better qualified for performing the several Motions, and assisting the Concoction of



the Aliments; for which Reason we can far better bear Aliments of difficult Digestion in that Season, than in any other.

As, during the Winter, Transpiration is in some measure obstructed, because the cutaneous Ducts are braced up by the cold Air; hence the Use of rich Wines, and strong Ales, becomes highly proper. It is also expedient to make frequent Use of warm Broths, and Infusions; and Care is always to be taken, that the Perspiration bear a Proportion to the Quantity of Aliment used.

It is a highly culpable Custom which prevails, especially among the *Germans*, of heating their Rooms, in cold Weather, so intensely hot, that Persons are, in a manner, scorched during their Stay in them; for when, a little after, they expose their Bodies to the cold Air, for the sake of Relief, they procure to themselves catarrhus Defluxions, Coryzas, and Weakness of the Head, which, in Process of Time, generally bring on dangerous nervous Indispositions.

In the Spring something is to be retrench'd from the Quantity of our Aliments, and the Liquor we usually drink is somewhat to be enlarged. During this Season, also, Venery is most safe, and is less likely to be injurious to the Health of the Body.

Those but ill consult their Health, who, in the very Beginning of the Spring, lay aside their Winter Clothes, and use such slender Garments as are only proper for the intense Heats of the Summer. During the Spring the State of the Atmosphere undergoes a great Variety of Changes, and there is almost a perpetual Vicissitude of Heat and Cold. If, therefore, a hot Constitution of the Air is suddenly changed into a cold State of Weather, the Cold insinuates itself into the open Pores of the Skin, and contracts them: Hence the cutaneous Exhalations, the Emission of which is so salutary in the Spring, are, to the great Prejudice of Health, retain'd within the Body.

An obstructed Perspiration is at no time to be more dreaded than in the Spring, because it prepares and disposes the Body for the Attacks of the most terrible Disorders. This is sufficiently proved by the various Diseases and Fevers, especially of the exanthematous Kind, which generally rage in the Spring, and which draw their Origin from nothing more than an obstructed Perspiration; for, during the Winter, the superfluous Juices of the Aliments are too largely accumulated in the Body; and, in the Spring, Nature endeavours to throw them off by a greater Expansion, both of the solid and the fluid Parts: For this Reason the taking Measures, in order to preserve Health, is at no Season more necessary than in this: Hence it is become customary to use Venesection, and purify the Blood by gentle Laxatives and Infusions, in the Spring; for, at this time, the State of the Air is highly favourable to such preservative Methods. We are, therefore, to be very careful, that, during this Season, that salutary Perspiration, which eliminates the Sordes of the whole Body, be not obstructed.

No Seasons of the Year are productive of more Disorders than the Spring and Autumn. Now, since the greatest and most effectual Preservative of Health is a free Transpiration, our principal Care ought to be employ'd in preserving this Evacuation entire and uninterrupted, during these Seasons; for this Reason we are to guard ourselves sufficiently against the Inclemency of the Weather: And because the Atmosphere is, at these times, impregnated with many Exhalations injurious and prejudicial to Nature, we are to be highly careful not to expose ourselves to the inclement Air about the Beginning of the Spring, and the End of the Autumn, that is, in the Months of *March* and *November*, as also in Mornings and Evenings.

In the Autumn the same Phenomena are to be observed as in the Spring, because the Inclemency of the Air is the same, and the Changes of Weather are equally sudden and frequent, by which means Perspiration, which is absolutely necessary to Health, is easily obstructed; and because, at this Season, the Equinoctial happens, Diseases are to be prevented by what we call preservative Cures.

During the Summer, Health is most effectually preserved by Vegetables, and Draughts of diluting Liquors; but we are to abstain from such Aliments as are heavy, and of difficult Digestion, from Wine and Brandy, and from the unseasonable and excessive Use of Tobacco; which, however, may be permitted in the Spring and Autumn. But, according to *Celsus*, Venery is to be entirely abstain'd from during the Summer.

Different Sexes also require a different Diet and Regimen.

Women are weaker than Men, and, for that Reason, require a Diet and Regimen peculiar to themselves: They are of a spongy and lax Habit, for the most part, addicted to Indolence and Pleasure, drink little, have Bodies of a highly delicate and sensible Nature, much inclin'd to Spasms, and convulsive Motions, and disposed to generate a Redundance of Blood. Besides, at certain fix'd and stated Times, they have a regular Evacuation from the Veins of the Uterus; and, in consequence of these Circumstances, 'tis necessary, that Women, rather than Men, should have a Regimen, and Method of

Living, peculiarly and accurately adapted to their Habit and Constitution.

The Female Sex, as we are taught by Experience, are generally in the worst and most uncomfortable State of Health, when this Evacuation is disorder'd, and irregularly carried on; on the contrary, they are in a sound and flourishing State, when this Discharge is duly and regularly made: For this Reason, it ought to be the principal Care of the Physician always to preserve this Evacuation in a due and natural Condition, both with respect to Quantity, Time, and Order; and never to suffer it either to be disturb'd, or totally suppress'd, by an improper Diet, or the Neglect of a due Regimen. But nothing so effectually disturbs this Evacuation, as a free Admission of the Cold to the Belly, and inferior Parts, when the Menfes are just about to flow. This salutary Excretion is also palpably injur'd by violent Commotions of Mind, especially by the Influences of Dread and Terror, the Force of which is so great, that it frequently puts a Stop to the Discharge, after it is begun. Nor, in a Case of this Nature, is it expedient to use the harsher Methods of Cure, or to excite impure and filthy Ideas in the Patient; but Tranquillity of Mind is rather to be prescrib'd by the Physician, and, if possible, preserved by the Patient. At the time the Menfes flow, they are to abstain from all Acids, flatulent Substances, Aliments that are heavy, of difficult Digestion, and a refrigerating Quality; as also from Preparations of Milk, and Things of a viscid Nature. They ought, also, carefully to avoid toasted Bread soak'd with Butter, Draughts of cold Liquors, feculent Ale, and, in a Word, every thing of an astringent Quality.

When the Menfes are just about to be discharged, 'tis highly expedient and necessary to use all Measures in order to promote the free and brisk Circulation of the Blood. The liberal and copious Discharge of this recrementitious Fluid is excellently obtain'd by Infusions of Herbs moderately balsamic, such as Baum, Paul's Betony, Wall-flowers, and those of Marigold, Cinnamon, and fresh Lemon-peel, drank every Morning instead of Tea. It is also expedient to keep the Body always pretty soluble; for which Reason, if the Patient has been costive for any considerable time, an emollient Clyster is to be injected, or a Dose of the balsamic Pills exhibited. Moderate Exercise, and a temperate warm Air, are also of singular Service; and we are always to take care, that the Feet, and inferior Parts, be sufficiently defended from the Cold.

Pregnant Women are also to have a Regimen peculiar to themselves directed for them, lest the Mother herself, or the Fœtus, should sustain any Injury; for the Infant, included in the Uterus, is, as it were, a Part of the Mother's Body.

Such as is the Health of the Mother, the State of her Mind, and the Condition of her Humours, and their several Motions, such also the State of the Infant is: The more sound and robust, therefore, the Mother is, the more brisk and vigorous the Fœtus is observed to be; and whatever injures the Mother, is still more prejudicial to the Health of the tender Fœtus. For this Reason Women, in a State of Pregnancy, ought to take particular care of their Health, and, as much as possible, conform themselves to the Rules of a proper Regimen.

Women ought principally to use such Aliments as generate a laudable and balsamic Blood in the Body, procure a due Degree of Fluidity to the Humours, and eliminate the superfluous and recrementitious Parts from the vital Juices: But they ought to abstain from all Substances which are not of a due Temperature, which either throw the Humours into too violent Commotions, render them impure, or generate too large a Quantity of Blood: For, since every Degree of Intemperature or Excess is prejudicial to the Health and Constitution of the Body, it must prove much more so to pregnant Women: For this Reason they ought to guard against the violent Sallies of Passion, immoderate Cold, intense Heat, too liberal a Repletion with Aliments, violent Exercise, long Sleep, Foods of difficult Digestion, and depraved Juices, all drastic Emetics and Purgatives, and, in a Word, whatever, in consequence of its Energy and Activity, throws the Humours into too violent Commotions. But the Health of pregnant Women is much more effectually preserved by such Substances as are of a mild and temperate Nature, generate balsamic and laudable Juices in the Body, are easily digested, and soon pass thro' the Emunctories.

Since, in pregnant Women, a Cessation of the menstrual Discharge necessarily throws them into a plethoric State, nothing more effectually contributes to the Preservation of the Health, both of the Mother and Fœtus, than seasonable Venesection, which in some becomes necessary in the second, but in most in the third Month; and this Operation is to be repeated in the seventh or eighth, as the Necessity and Condition of the Patient require it. The superfluous Blood, in the Bodies of pregnant Women, is to be taken away by Venesection; because, when it is left in the Habit, it throws both Mother and Fœtus into violent Disorders. But, because some Women have a far larger Quantity of Blood than others, for this Reason



son one Venesection is by no means sufficient to make a due Evacuation; but the Operation is, in these Patients, to be three or four times repeated; for by this means Abortion, and the other Misfortunes incident to pregnant Women, are excellently prevented.

The Plethora, generally incident to pregnant Women, for the most part, produces a Cacoehymia. The Physician, therefore, to whom the Health of the Mother and Fœtus is entrusted, ought, above all things, to attempt the Prevention of this Depravity and Degeneracy of the Humours, by proper Remedies. This Intention is excellently answer'd by such mild Evacuants, as gently eliminate the impure and peccant Humours collected in the *Primæ Viæ*. Thus *Hippocrates*, in the twenty-ninth Aphorism of his fifth Section, tells us, "That pregnant Women, when abounding with superfluous Humours, are to be purged, from the fourth to the seventh Month, tho', about the seventh, not so much." This Intention is answer'd by balsamic Medicines, which, whilst they gently evacuate, at the same time corroborate and strengthen the Stomach, Intestines, and whole nervous System. Of this Kind are the *Pilulæ Becheri*, and the *Pilulæ Rhabarbarinæ*; as also Raisins, impregnated with Rhubarb, with the Addition of a little Cinnamon.

Drastic Purgatives are highly prejudicial to pregnant Women, because, by affecting the Membranes of the Intestines, and the nervous Parts of the Body, with violent Spasms, they stimulate the Uterus to the Expulsion of the Fœtus, or even destroy the Tone and Strength of the Stomach.

Such Substances as render Perspiration free and easy, contribute greatly to remove the Impurity of the Juices; for which Reason pregnant Women ought frequently to use the fix'd Bezoardic Powders, the Elixir Stomachale, warm Infusions of Herbs, moderate Exercise, and generous Wines; but these are to be used sparingly, and at proper Seasons.

During the first Months of Pregnancy, Women should not eat very liberally; and, through the whole Course of Gestation, Temperance is highly commendable; for the smallest Degree of Repletion produces Crudities, which prevent the Generation of laudable Juices. Hence 'tis confirm'd by Experience, that too liberal an Indulgence in the Use of Aliments, prevents or retards the Nourishment of the Fœtus; and we find, that fat Women frequently bring into the World weakly and extenuated Children; whereas the Infants of lean Mothers are often fat, robust, and vigorous.

Pregnant Women ought, above all Things, to guard against Commotions of Mind, especially Dread, and groundless Fancies, which are highly injurious to the Health of the Fœtus, and disturb or hinder the due Conformation of its Parts. 'Tis sufficiently confirm'd, by Experience, that the deprav'd and groundless Imaginations of Mothers frequently imprint lasting Deformities on the Bodies of Children; and this Misfortune principally happens during the last Months of Gestation. *Frederic Hoffman, Medicin. Rational. Systemat.*

**DIÆTEMA**, διαίτημα, the same as ΔΙÆΤΑ, tho' *Galen, ad Thrasyl.* calls the rest of the Non-naturals, besides Meat and Drink, by that Name. *Castellus*.

**DIÆTETICA**, from *Diæta*, is that Part of Medicine which prescribes a due Regimen with regard to the Use of the Non-naturals. *Blancard*.

**DIAGLAUCIUM**, *Diaglaucin*, διαγλαυκίον, is the Name of a Collyrium, recommended by *Scribonius Largus, Numb. 22.* for beginning Lippitudes and Ophthalmies. It takes its Name from *Glaucium*, which, according to *Dioscorides, Lib. 3. Cap. 100.* is the Juice of an Herb growing about *Hierapolis*, a City of Syria. *Dale* takes this Herb for the purging Thistle. See the Composition of this Remedy in *Scribonius Largus, Numb.* before quoted.

**DIAGNOSIS**, διάγνωσις, from διαγνώσκω, to discern, or distinguish, is defin'd by *Galen, Com. 1. in Progn. ἡ τῶν ἐνισταῶν γνώσις*, "a Knowledge of Things, as they are in the present State." This Knowledge is acquir'd by the Observation of certain Signs or Characters, which are therefore call'd *Signa Diagnostica*, the diagnostic Signs.

**DIAGRYDIUM**. See SCAMMONIUM.

**DIAHERMODACTYLUM**, δι' ἑρμωδακτύλου, a purging Remedy in *Trallian, Lib. 11.* in which the *Hermodactyl* is a principal Ingredient.

**DIAION**. The Name of a Pastil or Troche in *Myrepsus, Sect. 41. Cap. 48.* It ought to be διαίων, of Violets, a principal Ingredient in the Composition.

**DIAIREOS**. The Name of an Antidote in *Myrepsus, Sect. 1. C. 103.* in which the *Iris*, *Orris*, is a principal Ingredient.

**DIAITHROS**, διαίθερος. This is explain'd by *Galen, διαφανής*, pellucid, transparent.

**DIALACCA**. The Name of an Antidote in *Myrepsus, Sect. 1. C. 123.* in which *Lacca* is a principal Ingredient.

**DIALAGOUU**, διαλαγών. The Name of a Medicine in *Alexander Trallianus, L. 8. C. 2.* in which the Dung of a Hare is an Ingredient. According to this Author, it is an

approv'd Remedy against Indurations and Obstructions of the Liver and Spleen.

**DIALEIMMA**, διαλειμμα, from διαλείπω, to intermit. An Intermission; that is, the Interval betwixt the End of one Paroxysm, and the Beginning of another.

**DIALEPSIS**, διαλεψις, from διαλαμβάνω, to interpose, or intermit. It imports much the same as *Apolepsis*, which see. *Hippocrates* uses it, *Lib. de Arte*, to express the Interstices, or Spaces left betwixt the Revolutions of Bandages.

**DIALIBANON**. The Name of several Medicines in *Myrepsus, Trallian*, and *Marcellus Empiricus*, in which Frankincense is a principal Ingredient.

**DIALOES**, δι' αλόου. The Name of several Medicines whose Basis is Aloes.

**DIALTHÆA**, διαλθαία. The Name of an Ointment in *Myrepsus, Sect. 3. Cap. 49.* from which the Unguentum Dialthææ of the Dispensatories seems to have been taken. See ALTHÆA.

**DIALYSIS**, διάλυσις, from διαλύω, to dissolve, (the Strength) or render languid. A Dissolution of the Strength, or Weakness of the Limbs.

**DIAMARENATUM**. From *Amarenæ*, red subacid Cherries. There are two Medicines call'd by this Name in *Schroder*, the Simple, and the Compound. The Simple is made of the Pulp of Cherries, (*Amarenæ*) passed through a Sierce, three Pounds; and Sugar, two Pounds. The Compound is made in the same manner, with an Addition of Aromatics. The Virtues of these may be known by those of Cherries. See CERASA.

**DIAMARGARITON**, διαμαργαρίτων. The Name of an Antidote in *Myrepsus, Sect. 1. C. 37.* in which Pearls are a principal Ingredient.

**DIAMASCIEN**, or DYAMASSIEN. The same as *Flos Aëris*. *Rulandus*. See AËS.

**DIAMASSEMA**, διαμάσημα, from διαμασάομαι, to chew. A Masticatory. See MASTICATORIUM.

**DIAMBRÆ SPECIES**. The Name of two Medicines in the *London Dispensatory*, one call'd *Species Diambræ sine Odoratis*, the other *Species Diambræ cum Odoratis*.

The *Species Diambræ sine Odoratis*, *Species Diambræ*, without Perfumes, is thus prepared:

Take Cinnamon, Angelica-roots, Cloves, Mace, Nutmegs, the *Indian Leaf* or *Malabathrum*, and *Galangal*, of each three Drams; *Spikenard*, and the greater and lesser *Cardamoms*, of each one Dram; of *Ginger*, a Dram and a half; of *Aloes-wood*, yellow *Sanders*, and long *Pepper*, each two Drams: Make them into a Powder.

This is originally a Prescription of *Mesue*, and exactly transcribed from him by the College into their first Dispensatory: Afterwards, indeed, they rejected the *Doronicum*, or *Wolf's-bane*; but now not only that, but the Perfumes, are quite expung'd, as being wholly remote from the main Intentions of the Medicine, and prejudicial to many Constitutions: Altho' as some particular Cases may require these very Ingredients, the College have allowed of them in the following. This is esteem'd a great Cephalic and Cordial, and is frequently prescribed in nervous Decays, from Apoplexies, Epilepsies, Palsies, and old Age. It strengthens the Stomach in particular, raises the Spirits, and warms the Blood to a very great Degree; whereby it is a Provoker to Venery, but more as a Stimulus, than by supplying any fresh Recruits to those Parts, or augmenting the Ability of Performance. Its Dose is from ten Grains to half a Dram.

The *Species Diambræ cum Odoratis*, *Species Diambræ*, with Perfumes, is thus directed:

This is made by an Addition to the foregoing Species, of *Ambergrise*, one Dram and a half; and of *Musk*, half a Dram.

**DIAMELON**. The Name of two Compositions in *Trallian, L. 7. C. 7.* in which Quinces are a principal Ingredient.

**DIAMISYOS Collyrium**. The Name of a Collyrium in *Marcellus Empiricus, C. 8.* in which *Misy* is a principal Ingredient.

**DIAMNES**. An involuntary Discharge of Urine; that is, when the Urine is discharged without the Consciousness of the Patient. It is a barbarous Word, made use of by *Johannes Anglicus*.

**DIAMORON**, διαμόρων. The Name of a Preparation of Mulberries and Honey. See MORUS.

**DIAMOSCIUM**. The Name of an Antidote in *Nicolaus Myrepsus, Sect. 1. C. 223.* so call'd from *Musk*, the principal Ingredient. There is also a Species, directed in the old College Dispensatory, under the Title of *Species Diamoschi dulcis*, which is left out in the last.



DIAMOTOSIS, *διαμώσις*, from *μωτός*, Lint. The Introduction of Lint into a Wound or Ulcer.

DIANA, in Chymistry, is the Silver of the Philosophers.

DIANÆ ARBOR, the Tree of *Diana*. It is prepared of a due Mixture of Silver, Mercury, and Spirit of Nitre, crystalliz'd together in the Form of a small Tree. Thus, for Instance :

Take an Ounce of Silver ; dissolve it in two or three Ounces of Spirit of Nitre ; evaporate your Solution in a Sand-heat, to about the Consumption of half the Liquor : Pour what remains into a Matrafs, in which there are twenty Ounces of pure Spring-water ; add two Ounces of Quick-silver ; place your Matrafs on a small Bundle of Straw, and suffer it to remain in a State of Rest for forty Days ; during which time, there will be a small Tree produc'd with Branches ; at whose Poin's are small Globules, resembling Fruit.

Though this Process is not of any formal and direct Use in Medicine, yet, as it is highly curious, and suggests some Phenomena, the Explication of which may possibly enlarge the Mind of the inquisitive Chymist, we shall make some Remarks upon it.

These Branches, then, are produc'd by the Spirit of Nitre, which, being incorporated with the Silver and the Mercury, assumes different Figures, according to the Quantity of Liquor in which it spreads and diffuses itself ; for if ten or twelve Ounces of Water were only used in this Operation, a Species of contus'd Crystals would only be produc'd : On the contrary, if too large a Quantity was employ'd, nothing would appear but a small Quantity of a precipitated Powder. 'Tis necessary the Mixture should remain in a State of Rest for forty Days ; because the Spirit of Nitre, being pretty much weaken'd by the common Water, must of course operate very slowly. If we remove the Matrafs, we of course break and discompose the beginning Figure, which, however, will form itself afresh, if the Vessel is suffer'd to continue in a State of Rest. This Process is more commodiously carried on in a cool, than in any other Place, because it is properly a Species of Crystallization.

This Operation has some Analogy with that perform'd in the Earth, in order to the Generation and Growth of Plants ; for, if the Seed has too large a Quantity of Moisture, the Spirits subservient to the Dilatation of its Parts will be so weak, as to become incapable of acting any longer : Hence nothing at all will be produc'd. If, on the contrary, the Seed has too small a Quantity of Moisture, the Spirits, not finding a sufficient Space to extend and diffuse themselves in, will either remain pent up within their former Boundaries, or evaporate themselves in the Air. But when there is a due Proportion of Water in the Earth, then these Spirits, being in a proper Degree of Motion, and extending themselves insensibly, rarefy and extend the Substance of the Seed ; a Circumstance on which the Vegetation of Plants depends. But to return to our Process.

When we have a mind to separate the Silver from the Mercury, the Whole must be stir'd about, pour'd into an earthen Dish, boil'd for half a Quarter of an Hour, taken off the Fire, and suffer'd to cool, till it is little more than tepid. Whilst it is in this State, pour into it gradually a Pint of Water, in which two Ounces of Sea-salt have been previously dissolv'd ; by which means a white Precipitate will be form'd. Pour off the Water by Inclination, and dry the Precipitate ; then put it into a Retort, placed in a Sand-heat ; and, adapting to it a Receiver full of Water, apply a small Degree of Fire at first, but augment it gradually, till the Retort becomes red ; by which means your Quicksilver will be distil'd, Drop by Drop, into the Water in the Receiver. Continue the Fire, till no more is yielded in Distillation. Suffer the Vessels to cool ; pour the Water from the Receiver, and after having wash'd the Mercury in it, dry it with a linen Cloth, or with the Crumbs of Bread, and preserve it for future Use.

In the Retort you will find your Silver, which you may reduce to an Ingot or Wedge, by fusing it over a brisk Fire in a Crucible, with a small Quantity of Saltpetre.

I once, says *Lemery*, calcin'd the Precipitate in a Crucible, instead of subjecting it to Distillation, thinking, that, by this means, the Mercury would be evaporated, whilst the Silver remain'd. But the Whole was dissipated in the Air, with a certain Degree of Noise, and nothing remain'd in the Crucible ; because the Silver, in consequence of its Conjunction with the Mercury, had been render'd volatile.

Another Species of the *Arbor Dianæ* may be produc'd in the following Manner :

Dissolve an Ounce of pure Silver in three Ounces of Aqua-fortis, either in a Phial or small Matrafs ; place your Vessel in Sand, and, by a moderate Heat, evaporate half of the Aqua-fortis. Then add three Ounces of the best distil'd

Vinegar, somewhat warm'd. Stir the Mixture, and then dispose of your Matrafs in some Place where it may remain in a State of Rest for about a Month ; during which time, there will be produc'd a small Tree, resembling a Fir, and whose Top will reach to the very Surface of the Liquor.

This Species of philosophical Tree is also a kind of Crystallization, produc'd by the Silver, penetrated by the Acids of the Aqua-fortis, and the Vinegar. It may be again reduc'd into Silver, by pouring Water upon it, in order to make it precipitate into a white Powder, which is to be fus'd over a brisk Fire in a Crucible, with a small Quantity of Borax, or Saltpetre. *Lemery, Cours de Chym.*

DIANANCASMUS, *διαναγκασμός*, from *ἀνάγκη*, Necessity, Force. The forcible Restitution of a dislocated Part into its proper Place. *Hippocrates* calls an Instrument by this Name, which is intended for restoring a distorted Spine, in his *Treatise de Articulis*.

DIANISTESMOS, *διανίστημι*. The same as *Acratisma*, which see.

DIANCEA, *διάνεια*. The Mind. See *Animus*.

DIANTHON, *δι' ἀνθῶν*. The Name of an Antidote in *Nicolaus Myrepsus, Sect. 1. C. 454.* from *Galen*. From this, probably, the Hint of the Species *Dianthus* was taken, which is thus directed by the College :

Take of Rosemary-flowers, one Ounce ; of red Roses and Liquorice, of each six Drams ; of Cloves, Spikenard, Nutmegs, Galangal, Cinnamon, Ginger, Zedoary, Mace, Aloes-wood, the lesser Cardamoms, the Seeds of Dill, and Anise, of each four Scruples ; and make them into a Powder together.

*Zwelfer* gives it an uncommon Recommendation for a Cardiac ; and praises it also in Defluxions, and many Weaknesses of the Constitution from Indigestion. It is certainly a very good Composition for all nervous Intentions, and does not give such Disorders as sometimes those with the Sweets do ; it is a great Strengtheners of the Brain, and a good Preservative against those Distempers which Age is subject to bring upon it, as Apoplexies, Epilepsies, Palsies, Loss of Memory, and the like. It greatly warms the Stomach and Bowels, and invigorates the whole Mass of Humours. Medicines of this Kind are of great Service in cold cachectic Habits, where the Load of Humours has been forced away by strong Detergents and Cathartics, and the Fibres are left weak, so as to be continually liable to relapse ; because they strengthen the Solids, fill them with due Spirits, and procure such a vigorous Vibration and Circulation, that afterwards a proper Digestion and Separation is made, and all Supply cut off, which might occasion a Return. Things of this Nature are therefore indispensably necessary after Purging in Dropsies, or to be given in their Intervals ; and, for want of this Knowledge, many, whose utmost Acquaintance in Physic goes no farther than a few violent Purges, undertake such Cures ; and make short ones, by carrying off the present Load, but cannot prevent a Return of the Disease.

DIAOPORON, *διὰ ὀπωρῶν*. The Name of a Composition describ'd by *Trallian, L. 7. C. 7.* It is thus call'd from *ὀπώρα*, autumnal Fruit ; because Quinces, Services, and Medlars, enter its Composition.

DIAPASMA. The same as CATAPASMA, which see.

DIAPEDESIS, *διαπήδησις*, from *διαπιδάω*, to leap thro'. A Transudation of the Fluids through the Sides of their containing Vessels.

DIAPENCIA is, according to *Rulandus*, the *Alchimilla*.

DIAPENSIA. A Name for the *Sanicula Officinarum*.

DIAPEPEREON. The Name of an Antidote describ'd by *Nicolaus Myrepsus, Sect. 1. C. 184.* from *Galen*.

DIAPHANES, *διαφανής*. Transparent, or red-hot.

DIAPHILEDONU, *διὰ φιληδόνου*. The Name of an Antidote in *Myrepsus, Cap. 124.*

DIAPHLYXIS, *διὰ φλύξης*, from *διαφλύζω*, to irrigate, or moisten, is expounded in *Galen's Exegesis* on *Hippocrates*, by *ὑπερβλύσις*, Effusions, Ebullitions.

DIAPHENCON, *διὰ φοινίκων*, from *φῶνιξ*, a Date, is a Medicine made of Dates.

DIAPHORA, *διαφορά*, of *διαφέρω*, to differ ; Difference. In Medicine it comprehends the characteristical Marks, or Signs which distinguish one Disease from another.

DIAPHORESIS, *διαφύρεσις*, from *διαφύρω*, of *διὰ*, through, and *φέρω*, to carry ; is an Elimination of the Humours in any Part of the Body through the Pores of the Skin.

DIAPHORETICA. Diaphoretics, or Medicines which promote Perspiration. See ALEXIPHARMICA.

*Hippocrates* relates the Cases of some Patients, whose Fevers were terminated after the Eruption of Sweat, whether that Sweat really put a Period to the Disease, or only appear'd at its End ; as it happen'd in the Instances recorded *Lib. 1. Patient 6. 7. Lib. 2. Sect. 2. Patient 7. 11. 12.* in which Patients the



the Fever seems rather to be terminated by an Eruption of Blood than of Sweat; for Sweat, so far as I can perceive, is not, by *Hippocrates*, always propos'd as an Instrument by which the Disease is cur'd, but only as a Mark, or Sign, from which its Event or Termination may, with the greater Certainty, be prognosticated. For this Reason, in those Books of his, which are accounted genuine, he no-where mentions sudorific Medicines; and even in those Works, which are falsely ascrib'd to *Hippocrates*, there is only once Mention made of a Sweat procur'd or forc'd by Medicines; for the Author of the second Book of the *Epidemics* orders a Sweat to be procur'd by carefully covering the Patient with the Bed-clothes, and exhibiting Meal boil'd in rich and generous Wine. Nor does he even prescribe these Measures as proper to be taken, except in those Fevers, which arise from Lassitude, or some other similar Cause, such as those commonly call'd Diary Fevers.

Internal Medicines for producing Sweats were so little in Use among the Antients, that *Celsus* has not a single Word upon this Subject. If, therefore, Sweats are of any Advantage, in Fevers of this kind, they seem to derive their Efficacy from Nature alone: During these Sweats, perhaps, the peccant Matter might be easily dissipated, and carried thro' the Skin; either on account of the Temperance of the Climate, or by the good Constitutions of the Patients, which were not yet corrupted by Sloth and Luxury: But in the present Condition of Mankind we in vain expect the Solution of a Disease by Sweat, whether spontaneous and natural, or procur'd by Art; and I believe I may justly venture to affirm, that in violent Fevers the Patients are rarely restor'd by Sweats alone.

But from the Times of the *Arabian* Physicians there has appear'd such a Multitude of sudorific Medicines, that there is scarce any Species of Fever, against which some of the Chymists, or some curious old Woman, has not found out an Antidote, without having any manner of Regard to the Nature of the Disease. Hence that Custom has been handed down to our Days, of treating feverish Patients with Cordials, as promising the most grateful and agreeable Cure. Thus, for the sake of the Agreeable, we fall into an Error, which is in no Case more dangerous, than when the Interests of Health happen to be concern'd.

This Method, as consisting too much in hot Medicines, is justly rejected by *Sydenham*, tho' it does not, as yet, seem to be sufficiently banish'd from the modern Practice; for, according to the Confession of Physicians themselves, the Exhibition of hot Substances, and such as excite profuse Sweats, accelerate the Circulation of the Blood: Hence the Fever gradually increasing, and seizing the Brain, we observe that the Deliriums and Distentions of the Nerves are so far from being remov'd, that they are rather augmented. This is an Effect, which may be constantly observ'd by those, who in the Treatment of acute Fevers, are so excessively fond of Snake-root, Salt of Hartshorn, and other hot Substances. The same Effect is generally produc'd, when, in Fevers already remitting, the *Peruvian* Bark happens to be imprudently exhibited, by the Use of which Physicians generally find, that the Fever, which was upon the Decline, is forthwith heighten'd, and render'd more violent. When Things are brought to this deplorable State, then a Principle of Terror and Uncertainty begins to influence their Minds; they have recourse to Vomits, Venesection, and Vesicatories, as the last and most important Remedies. This preposterous Method of Cure is, therefore, attended with this signal Disadvantage, that it reduces the Practitioner to a Necessity of taking those Measures at the Decline of the Disease, which he ought to have taken at its Beginning. Thus those Means of Relief are often tried at an unreasonable Time, which, when skilfully prescrib'd in the Beginning of the Disorder, generally prove highly beneficial to the Patient.

Others run into a different, tho' not a less fatal and pernicious Error, who, placing all their Hopes of a Cure in Acids, forthwith have recourse to Vinegar or Verjuice; as if it was expedient to kill a Patient with Cold, because it was not proper he should be parch'd with Heat.

I would not, by what has been said, be thought absolutely to dissuade the Use of such Medicines as provoke Sweat in the Cure of Fevers; for I cannot deny, but as Sudorifics of a mild and temperate Nature are productive of happy Effects, so they not only may, but also ought to be us'd, when Circumstances indicate their Propriety. But, since the respective Natures of the hot and cold Substances already mention'd recede too palpably from the due Medium, they are, therefore, to be absolutely rejected by the Physician, as hurtful and injurious. Neither is it safe to trust to the milder Sudorifics alone; for, by the previous Use of Evacuants, they not only relieve the Fever more effectually, but also provoke Sweat more expeditiously. This Circumstance holds remarkably true, with respect to Opium, than which no Medicine is more effectual

for opening the Pores of the Skin. *Freind. Comment. 3. in Hipp. Epidem.*

DIAPHOROS, διαφωρος, in *Hippocrates, Lib. de Articulis*, signifies pertinent, or to the Purpose.

DIAPHRADES, διαφραδης, διαφραδης, in *Hippocrates, de Locis in Homine*, is expounded by *Erotian*, σαφης, manifest, evident.

DIAPHRAGMA, διαφραγμα, from διαφραζειν, to make a Partition, or Interclosure; of δια, through, and φραγμα, to close; the Diaphragm; called also the Midriff. It separates the Thorax, and Organs of Respiration, from the Belly: It is frequently called by *Caelius Aurelianus*, the *Discrimen Thoracis & Ventris*; and, *Cap. 12. Lib. 1. Tard. Pass. Discretorium*. *Pliny* calls it the *Præcordia, quod Cordi prætendatur*, "because it stands like a Wall or Fence before the Heart." The Antients called it σφιγς, as in several Places of *Hippocrates*; who also gave the Name of διαφραγμα to the strait Place of the Fauces, between the Mouth and the Oesophagus, terming it, by way of Distinction, τὸ κατὰ γαργαραία διαφραγμα, "the Diaphragm by the Oesophagus." *Lib. 2. Epid. Galen* also, and *Rufus Ephesus*, call the cartilaginous Partition between the Nostrils, τὸ τῆς μύτης διαφραγμα, "the Diaphragm, or Partition of the Nose."

But the only Part, which is now call'd *Diaphragma*, is that which separates the Thorax from the Abdomen.

This is a very broad and thin Muscle, situated at the Basis of the Thorax, and serving as a transverse Partition to separate that Cavity from the Abdomen: For this Reason, the *Greeks* termed it *Diaphragma*; and the *Latins*, *Septum Transversum*. It forms an oblique inclined Arch, the fore Part of which is highest, and the posterior Part lowest, making a very acute Angle with the Back.

It is looked upon as a double and digastric Muscle, made up of two different Portions; one large and superior, called the great Muscle of the Diaphragm; the other small and inferior, appearing like an Appendix to the other, called the small or inferior Muscle of the Diaphragm.

The great or principal Muscle is fleshy in its Circumference, and tendinous and aponeurotic in the Middle; which, for that Reason, is commonly call'd *Centrum nerveum, sive tendinosum*. It must not, however, be imagined, that this middle Part is of small Extent; or that it is round, because Anatomists have named it the Centre; for, in so doing, they had regard only to its Situation, not to its Form, or the Space it takes up. It is of a considerable Breadth, and represents, in some measure, a Trefoil-leaf, supposing the Part to which the Foot-stalk is fixed, to be sloped, and that this Slope is turned backward, and the middle convex Part, forward; and therefore I chose to call it simply, the middle Aponeurosis, or aponeurotic Plane, of the Diaphragm.

The fleshy Circumference is radiated; the Fibres, of which it is made up, being fixed, by one Extremity, to the Edge of the middle Aponeurosis; and, by the other, to all the Basis of the Cavity of the Thorax; being inserted, by Digitations, in the lower Parts of the Appendix of the Sternum, of the lowest true Ribs, of all the false Ribs, and in the neighbouring Vertebrae.

We have, therefore, three kinds of Insertions; one sternal, twelve costal, six on each Side, and two vertebral, one on each Side: These last are very small, and, sometimes, scarcely perceivable. The costal Insertions join those of the Transversalis Abdominis, but do not mix with them, as they seem to do, before the Membrane, which covers them, is removed. I need not mention here some communicating Fibres of the same Nature with those found in other Muscles; as for Instance, between the Obliquus Externus and Pectoralis Major.

The Fibres inserted in the Appendix Eniformis run from behind directly forward, and form a small parallel Plane. I have sometimes observed a Fasciculus of Fibres detached from the under Side of this Plane, to run down on the Inside of the Linea Alba, in which it is inserted near the Navel.

The first costal Insertion runs a little obliquely towards the Cartilage of the seventh true Rib; a triangular Space being left between this and the sternal Insertion, at which the Pleura and Peritonæum meet. The Insertion of these Fibres is very broad, taking up about Two-thirds of the Cartilage of the seventh Rib, and a small Part of the Bone, from whence it reaches beyond the Angle of the Cartilage.

The second Insertion is into the whole Cartilage of the first false Rib; the third, partly in the Bone, and partly in the Cartilage of the second false Rib; the fourth in the Bone, and sometimes a little in the Cartilage, of the third false Rib; the fifth in the Bone, and a little in the Cartilage, of the fourth false Rib, being broader than the rest.

The sixth is in the Cartilage of the last false Rib, and almost through the whole Length of the Bone. At the Head of this Rib, it joins the vertebral Insertion, which runs from the lateral Part of the last Vertebra of the Back, to the first Vertebra of the Loins.